Essays on firm growth and value creation

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Chapter 1

Introduction

1.1. Organizational experience and valuable corporate expansions

Perhaps the most important trends in the economic environment over the past few decades are the rapid technological progress, the opening up and liberalization of new potent markets (such as China or former socialist countries), and the increasing globalization (Barkema, Baum, & Mannix, 2002; Bettis & Hitt, 1995; Hitt, Keats, & De Marie, 1998). A product of these trends is what has been termed the 'new competitive landscape' (Bettis & Hitt, 1995; Hitt et al., 1998), where corporate decision-makers are confronted with major strategic challenges due to uncertainty, ambiguity, and complexity of their tasks across various environments. Companies respond to these new pressures in a variety of ways, among which the use of cooperative strategies (cf. Brown & Eisenhardt, 1997; Gomes-Casseres, 2003; Steensma & Lyles, 2000), exploitation of global markets (cf. Hennart, 2000; Lu & Beamish, 2004; Mitchell, Shaver, & Yeung, 1992, 1993), and changes in product scope (cf. Bettis & Prahalad, 1995; Delios & Beamish, 1999; Markides & Williamson, 1996) are some of the most prominent.

Above all, successful use of such strategies and long-term survival of firms in the highly competitive and globalizing world make it imperative that firms possess appropriate skills and knowledge. While learning from experience is one of the key ways of building such valuable repositories of routines and knowledge (cf. Cyert & March, 1963; Levitt & March, 1988; Hitt et al., 1998; Kogut & Zander, 1992; Nelson & Winter, 1982; Penrose, 1995), our understanding of what firms may in fact learn from different types of experiences and what helps them to successfully apply some of this knowledge in a variety of investment situations (cf. Haleblian & Finkelstein, 1999) is limited. It is only intuitive to expect that firms that are successful when operating in one type of environment – such as a specific industry, country, culture, etc. – may be unsuccessful using the same strategy and routines in another type of

environment. As globalization and technological progress make environmental change more of a rule than an exception, it is interesting to ask which strategies and routines help firms to succeed in this changing world.

In an attempt to enhance our understanding of these issues, in this thesis we take the perspective of shareholders to investigate which strategic moves and what types of experience help firms to enhance their value across a variety of environments. The key but not sole theoretical perspective relied on is the organizational learning theory (cf. Argyres & Schon, 1978; Barkema & Vermeulen, 1998; Cohen & Levinthal, 1990; Cyert & March, 1963; Fiol & Lyles, 1985; Levitt & March, 1988; March, 1991; Vermeulen & Barkema, 2001). Through these lenses, we first investigate how firms explore foreign markets (Chapter 2). Our departure point is the observation that when expanding into new and uncertain environments, successful companies often choose for strategic alliances, as these investment vehicles are particularly suitable for projects that have uncertain outcomes (cf. Brown & Eisenhardt, 1997, 1998; Geringer & Hebert, 1989; Mjoen & Tallman, 1997; Mody, 1993; Steensma & Lyles, 2000). Building on this idea, in Chapter 2 we develop theory and hypotheses in order to determine under which conditions two qualitatively and quantitatively distinct types of strategic alliances – majority- and minority-owned international joint ventures (IJVs) – are chosen and create most value for internationalizing firms.

Chapter 2 establishes that minority IJVs are particularly attractive means of exploring foreign markets under conditions of uncertainty, which may result from political factors and cultural differences. Conversely, majority IJVs are a preferred investment vehicle when uncertainty is low, for example thanks to past experience firms may have with a given culture. Another key finding of this study is that organizational experience with establishing and managing one type of joint ventures is not necessarily transferable to the other type, and may

even lead to negative firm value consequences, suggesting the need to further investigate the role of organizational experience in corporate expansion.

Indeed, the observed selective rather than universal applicability of various elements of organizational experience across diverse investment situations implies that its relationship with firm performance is more complex than it has been assumed previously in the International Business literature (e.g., Barkema, Bell, & Pennings, 1996; Eriksson, Johanson, Majkgård, & Sharma; 2000; Li, 1995). Hence, in Chapter 3 we delve into the issue of the *content* of international experience of firms (cf. Levitt & March, 1988), and develop theory and hypotheses in order to determine how two distinct types of international experience – its depth and breadth – influence firm value creation upon expansions abroad (cf. Luo & Peng, 1999). A key notion in this study is that past experiences and the resulting organizational routines may be inadequate relative to what would be needed for firms to successfully enter a given market (cf. Levitt & March, 1988, Nelson & Winter, 1982), which may possibly lead to misapplication of this experience and negative performance outcomes (Haleblian & Finkelstein, 1999). We propose that the diversity of organizational experience secures against such a possibility. We also note that the political, cultural, and macroeconomic *context* in which experience has been accumulated and to which it is possibly reapplied matters for firm capabilities to generate value with new foreign ventures (cf. Delios & Henisz, 2003).

In Chapter 4 we extend the analyses of the content and the adequacy of organizational experience to the context of corporate expansion within and across industries. Unlike the majority of prior studies in this particularly rich area of investigation (cf. Montgomery, 1994; Palich, Cardinal, & Miller, 2000), we propose a dynamic view on what kinds of steps firms may take on their diversification routes and which types of experiences help them to create most value when doing so. We explore the idea that past experiences from a given industry as well as from a broad range of industries are valuable, in particular when in combination with

one another. We also hypothesize that corporate expansions of an exploitative character – such as greenfield investments or entries into industries closely related to core activities of firms – are relatively more valuable with increasing within-industry experience. Conversely, experiences from a range of industries are particularly valuable for firms undertaking investments of a rather exploratory character, such as entries into unrelated industries or acquisitions.

Overall, the three studies show the importance of organizational experience for the ability of corporate leadership to create firm value, as perceived by capital providers, analysts, media, etc. The findings corroborate the key notion of this thesis: that it is important to consider both the quality and the content of organizational experience, rather than its quantity alone, when analyzing which strategies and under what conditions should be used by companies in their quest to become successful global players.

1.2. Notes on research design

Chapters 2, 3, and 4 combine theory development with empirical testing. Building on prior research, each of these chapters proposes novel theory and hypotheses on what makes corporate expansions valuable, or, technically speaking, how formations of new ventures impact shareholder wealth. Subsequently, hypotheses are tested empirically using state-of-the-art econometric methods, as explained in the chapters. As each of these studies constitutes an independent paper, significant overlaps in data and method descriptions will be encountered throughout.

The theoretical predictions derived in Chapters 2, 3, and 4 are tested on samples of new expansions undertaken by 25 Dutch multinational enterprises (MNEs) over the period of

1973-1998 (Chapters 2 and 4) and 1982-1998 (Chapter 3).[1] The samples are based on information provided in annual reports of these firms, press releases in the Dutch financial daily, *Het Financieele Dagblad*, and Amsterdam Stock Exchange data sourced from Datastream Advance database of Thomson™ Financial. Further details are provided in sections 2.6, 3.5, and 4.5.

Consistent with the theory presented in Chapters 2, 3, and 4, the core dependent variable used to test the hypotheses is firm value created with a new expansion. In the spirit of capital market efficiency hypothesis (Fama, 1976), it is assumed that Amsterdam Stock Exchange is a semi-strongly efficient market, i.e., that changes in share prices around public announcements of corporate expansions provide unbiased assessments of their economic consequences from the perspective of the company's shareholders. Hence, abnormal changes in stock prices upon such announcements are measured and used as a proxy for firm value creation. The same procedure is used to estimate firm value created with IJVs (Chapter 2), new international ventures (Chapter 3), and expansions within and across industries (Chapter 4). Additionally, in Chapter 2 we propose a novel approach to validating the event study method, where analyses of abnormal returns are combined with analyses of managerial choices and their impact on firm profitability over extended periods of time. Further details are provided in sections 2.6.2 and 2.7.2.

We now proceed with the three studies of valuable corporate expansions, conditional on firm-specific and contextual factors. Each of the papers is concluded with a discussion of implications and suggestions for future research. Chapter 5 summarizes the main findings of the thesis and further reiterates its limitations and potential extensions.

[1] The sample period used in Chapter 3 is shorter than the one used in either Chapter 2 or 4 due to limited availability of data on one of the key independent variables.

Chapter 2[2]

Exploring foreign markets through minority and majority international joint ventures

2.1. Abstract

This paper develops theory and hypotheses regarding how internationalizing companies use minority and majority IJVs to explore foreign settings and build a successful multinational corporation (MNC). We discuss how the choice of minority versus majority IJVs depends on political and culture risk, and on experience in cultural blocks and with the particular investment mode. The theoretical predictions are tested on data on 200 IJVs of 25 Dutch companies between 1973 and 1998. We examine both the expansion mode choice (majority versus minority IJVs, using logit models) as well as its implications for firm value (using event study methodology and regression techniques) and profitability (using panel data analysis methods).

[2] This paper is a result of a joint work with Harry Barkema.

2.2. Introduction

Over the past two decades, the opening up of markets around the globe and the increasing pace of technological innovation has thrown companies in many industries into a race to reap opportunities and invest beyond their national borders (Barkema et al., 2002; Doz, Santos, & Williamson, 2001; Hitt et al., 1998). Over this period, the stock of foreign direct investment (FDI) increased more than tenfold, to USD 7,100 billion (between 1980 and 2002, UNCTAD, 2003), and reached the level of USD 612 billion in 2004, a rise of 9% compared to 2003 (UNCTAD, 2005). However, companies are internationalizing in a politically uncertain and culturally fragmented world,[3] and many of their foreign investments fail (cf. Delios & Beamish, 2001; Li, 1995; Mitchell et al., 1992, 1993). So far, even out of the Fortune 500 companies, only 2.4% have become truly global (Rugman & Verbeke, 2004). This underscores the idea that investing in foreign countries is inherently hazardous.

Both management theory and evidence show that when expanding into new and uncertain environments, successful companies engage in exploration first, unlike less successful firms (cf. Brown & Eisenhardt, 1997; Johanson & Vahlne, 1977; March, 1991). Exploratory investments have been examined in the context of developing new technology (Brown & Eisenhardt, 1997, 1998; Rosenkopf & Nerkar, 2001), new products (Katila & Ahuja, 2002; Holmqvist, 2004; Rothaermel & Deeds, 2004), and new establishments (Baum, Li, & Usher, 2000; Winter & Szulanski, 2001). Exploration is particularly important if companies are involved in a competitive race (Grenadier, 2002; March, 1991), for instance, when they vie with others in their industry to become a successful global company. One way in which firms can explore dynamic competitive landscapes is through strategic alliances, as these investment vehicles are particularly suited for projects that have uncertain outcomes

[3] For instance, 42% of world FDI in 2004 was in developing countries (UNCTAD, 2005).

(Brown & Eisenhardt, 1997; Geringer & Hebert, 1989; Ireland, Hitt, & Vaidyanth, 2002; Kogut, 1991; Makhija & Ganesh, 1997; Mjoen & Tallman, 1997; Mody, 1993; Steensma & Lyles, 2000). In this study, we contributed to this area of knowledge by investigating how internationalizing companies use (and learn from) their FDI – in particular, minority and majority IJVs – to explore foreign settings and build a successful MNC.

Prior work in the area of joint ventures suggests that there is a variety of cooperative forms firms may choose among when attempting exploration of a new market, where different forms are suitable in different situations (Choi & Beamish, 2004; Geringer & Hebert, 1989; Hagedoorn & Duysters, 2002; Kumar & Seth, 1998; Mjoen & Tallman, 1997; Pan, 1996, 2002; Parkhe, 1993). Different types of joint ventures also differ in their performance outcomes (Choi & Beamish, 2004; Dhanaraj & Beamish, 2004; Geringer & Hebert, 1989; Makhija & Ganesh, 1997; Mjoen & Tallman, 1997). The distinction between minority and majority IJVs is particularly interesting (cf. Gatignon & Anderson, 1988; Hennart, 1991; Pennings, Barkema, & Douma, 1994), for two reasons. First, these two types differ in quantitative terms, where smaller stakes imply lower commitment of resources and less control as compared to larger stakes (Child, Yan, & Lu, 1997; Dhanaraj & Beamish, 2004; Kogut, 1991; Mjoen & Tallman, 1997). Second, holding a dominant or a subordinate position in an IJV may require different skills and interorganizational routines from participating firms (cf. Anand & Khanna, 2000; Kale, Dyer, & Singh; 2002; Pennings et al., 1994; Simonin, 1997; Zollo, Reuer, & Singh, 2002), while also implying different rights (Child et al., 1997).[4] Yet, it remains unclear how internationalizing firms use minority and majority IJVs as exploratory mechanisms, and how they perform as a consequence.

In order to address this question, we build on organizational learning research to develop theory and hypotheses regarding how firms use these exploratory investment modes

[4] For example, majority share in most countries conveys the right to set an IJV's policy (Child, 2002).

to build a successful company (in terms of firm value and profitability) in the face of political hazards (Henisz & Delios, 2001) and cultural risk (Barkema et al., 1996). Our (dynamic) theory further examines how the experience with cultural and political settings in 'cultural blocks' (for instance, South East Asia, Latin America, Central and Eastern Europe; cf. Barkema et al., 1996; Gatignon & Anderson, 1988; Park & Ungson, 1997; Ronen & Shenkar, 1985) and the experience with the investment vehicles themselves (i.e., minority and majority IJVs), influence the subsequent use of these investments modes and firm value creation as a consequence. We argue that companies may not only learn about foreign settings and about establishing and running the investment vehicle itself, but also that they their experiences in one role (for instance, that of a minority partner) may be inapplicable, and hence useless, in the other role (for instance, that of a majority partner).

We tested our hypotheses using data on 200 IJVs of 25 Dutch companies during the period of 1973-1998, when these companies were internationalizing intensively. Consistent with the hypotheses, we examined both the expansion mode choice (majority versus minority IJVs, using logit models) and its implications for firm value (using event study methodology and regression techniques). Event study methodology has generally been accepted in strategic management research (McWilliams & Siegel, 1997; Park, 2004). However, recent research (Westphal & Zajac, 1998) and practice (e.g., volatile stock markets, the bursting of the dot-com bubble) suggest that investors may imperfectly understand the long-term implications of strategic decisions for firm value. Hence, as a further check on the validity of the empirical tests, we examined whether the strategic choices implied by our theory enhanced firm profitability. We found that companies actively using majority and minority IJVs in ways predicted by our theory had considerably higher profitability over the window of analysis (26 years) compared to companies whose strategies were not in accordance with the theoretical predictions. This corroborated the key notion of our paper: that (examining) the

choice of minority versus majority IJVs is important both from a research perspective and from a strategic point of view.

2.3. Background

Investing beyond national borders is an inherently risky affair (Mitchell et al., 1992, 1993). When investing in their home countries, companies basically exploit their existing knowledge: of local suppliers, customers, about the local culture, etc. Hence, domestic investment implies relatively little uncertainty for firms. However, companies may also search for new investments opportunities beyond their national borders: to realize economies of scope and scale (Kim, Hwang, & Burgers, 1989, 1993), to lower manufacturing costs (Vernon, 1966), to tap into new knowledge of markets and technologies (Doz et al., 2001; Barkema & Vermeulen, 1998), or to play 'global chess' (Hout, Porter, & Rudden, 1982). Such planned variation and experimentation in new environments implies – at least initially – much uncertainty and risk for the company's foreign investments (March, 1991).

Prior literature has emphasized that firms may reduce such risk by engaging in cooperation with local partners and taking a partial stake in the venture (Bowman & Hurry, 1993; Folta & Miller, 2002; Kogut, 1991; Lu & Beamish, 2001; Mjoen & Tallman, 1997; Reuer & Leiblein, 2000). In this case, companies supply only a portion of the assets and are confronted with only part of the profits or losses from the investment, which minimizes their risk (Bowman & Hurry, 1993; Kogut, 1991). Moreover, IJVs allow firms to gain new knowledge, quickly enter new markets, and obtain complementary resources, all of which is needed to develop competitive advantage (Anand & Khanna, 2000; Khanna, Gulati, & Nohria, 1998; Lyles, 1988; Mody 1993), in particular in uncertain and competitive

environments (Brown & Eisenhard, 1997; Chi & McGuire, 1996; Folta & Miller, 2002; Grenadier, 2002; Kogut, 1991; Mitchell & Singh, 1992). However, such investments do not reduce risk entirely. In fact, the value a firm is able to realize from resources invested abroad remains subject to local economic and political conditions, the actions of local suppliers, customers, competitors, etc. Moreover, at least initially, the firm faces uncertainty due to lack of knowledge of the host country's culture, language, trade practices, etc. (Johanson & Vahlne, 1977; Zaheer, 1995). This makes it more difficult for the firm to deal with local parties, most importantly with the partner in the IJV. Indeed, cultural differences within the IJV may lead to conflict and misunderstanding, thereby increasing the likelihood that the IJV fails (Li, 1995; Barkema et al., 1996).

In addition to these challenges, the internationalizing company also needs to learn how to operate the investment vehicle itself (Barkema, Shenkar, Vermeulen, & Bell, 1997). More specifically, our study distinguishes between minority and majority IJVs. In minority IJVs, foreign investors tend to leave the managing of the IJV (in terms of selection of local suppliers, contacts with key customers, hiring, etc.) to local partners. Exercising disproportionate control over a minority-owned venture (as compared to equity stake), if possible, may require the minority partner to engage in subtle, often informal, governance arrangements and diplomacy (Schaan, 1988). Conversely, in majority IJVs, foreign parents, having made greater upfront investment in creation of their IJVs and facing higher exit costs than in minority IJVs, tend to have larger bargaining power and more influence on the ventures (cf. Child, 2002; Child et al., 1997; Dhanaraj & Beamish, 2004; Mjoen & Tallman, 1997). In what follows, we will argue that these are two different roles that internationalizing firms need to learn, where misunderstanding between partners, role conflicts, etc., may lead to the failure of the IJV as well. In sum, both in the case of differences in national cultures and in the case of different roles, misunderstanding and conflicts may occur, especially – as we

will argue below – if companies have little international experience, rendering IJVs a particularly risky affair.

2.4. Theory

We define the company's *knowledge base* as its rules, procedures, conventions, and strategies regarding how to operate abroad, as well as the underlying structure of knowledge and beliefs (cf. Greenwood & Hinings, 1993). We define *organizational learning* as expanding the company's knowledge base, which includes their routines (Levitt & March, 1988; Zollo & Winter, 2002) and knowledge and belief structures (Cohen & Levinthal, 1990; Walsh, 1995) regarding, in the present context, foreign national cultures and investment vehicles (i.e., minority and majority IJVs). A lack of knowledge in these domains, combined with a lack of 'specific knowledge' of the particular time and place (Hayek, 1945): of local suppliers, customers, competitors, etc., implies relatively high levels of uncertainty and risk regarding locally invested assets and the associated revenues and profits. This suggests that companies should invest in relatively small portions of local investment projects, while leaving the local management to the local partner.

Indeed, prior research showed that successful companies 'probe' new environments, where venturing is risky and its outcomes uncertain, using relatively small investments of physical and managerial resources (Brown & Eisenhardt, 1997, 1998). Such investments allow firms to test and establish toeholds in the new areas of business, building valuable (knowledge) platforms for future expansion while limiting downside risk (Kogut & Kulatilaka, 1994; Mody, 1993). In an international context, a strategy of relatively small expansion steps (for instance, when entering a new country where a firm has not invested

before) allows companies to learn about local conditions (the local culture, language, customers, competitors, policies, etc.) and develop local knowledge bases. Firms may rely on and build on these knowledge bases in the future, while limiting their overall risk (Johanson & Vahlne, 1977, 1990). Such relatively small steps, using partial stakes in foreign investment projects as opposed to larger investments, are particularly valuable the more uncertain the firm is about its chances to succeed in the host country (cf. Bowman & Hurry, 1993; Reuer & Leiblein, 2000; Rivoli & Salorio, 1996). Uncertainty and risk tax the value of firm resources committed to a foreign venture, and this 'tax' is comparably lower when investment outlays are smaller. The small as well as the large stakes can help the firm to secure an opportunity (platform) for future expansion in the new market should it prove attractive, but small stakes are relatively less expensive ways of doing so, in particular when uncertainty is high.[5] From this perspective, small rather than large 'probes' – or minority rather than majority IJVs – appear particularly valuable means of exploring uncertain environments.

Exploration through IJVs does not come without additional burdens though. Firms using such complex investment vehicles as IJVs (Lyles, 1988) grow increasingly complex themselves (Reuer & Leiblein, 2000). In addition to the normal tasks of selecting suppliers, handling customers, etc., internationalizing companies also need to deal and coordinate with a partner with a different culture (Barkema et al., 1996) and appropriately handle the investment vehicle itself (Barkema et al., 1997). Failure in either of these domains (such as misunderstanding or conflicts due to differences in national cultures or inappropriate role-playing) may influence the payoffs of the other variables (e.g., negate the benefits from how well suppliers are selected, key customers are dealt with, etc.), and eventually cause the IJV to fail. This underscores the idea that relationships between organizational variables are

[5] If we view IJVs as real options to expand stakes (cf. Kogut, 1991), then a minority stake implies larger option than a majority stake. As value of (real) options increases in uncertainty, the option value of a minority IJV is expected to increase more than the option value of a majority IJV.

complex in terms of their influence on outcome variables (McKelvey, 1999, Levinthal, 1997), in particular when expanding through IJVs. An important implication of this complexity is that IJV experience is difficult to interpret and subject to causal ambiguity (Levitt & March, 1988; March, Sproul, & Tamuz, 1991). Therefore, companies may require multiple IJV experiences to develop sufficient understanding of probability distribution of certain events (cf. Lyles, 1988). Decision-makers may also need to experiment with different configurations before they are able to make sense of the underlying causal model and to adopt valuable routines.

Importantly, minority and majority IJVs imply different roles for participating companies. Recent research in the context of acquisitions suggests that in early stages and with little experience, companies may be imperfectly aware of the differences among acquisitions, resulting in incorrect generalizations of what the company learned in the context of one type of acquisition to another type of acquisition (Haleblian & Finkelstein, 1999). Such incorrectly applied lesson may hamper rather than enhance performance of subsequent acquisitions. Similar generalizations may occur in the case of IJVs. Companies having gained some experience with one type of IJVs (for instance, majority IJVs) may generalize the experience and knowledge (in terms of causal models and routines) to settings where such knowledge does not necessarily apply (for instance, to minority IJVs). This may hurt performance when firms begin using minority and majority IJVs. Firms develop the knowledge (i.e., models and routines) how to create and operate minority and majority IJVs through experience. It is also through experience that companies can learn the scope conditions, i.e., the conditions under which they can apply one type of models and routines rather than the other.

In sum, learning from IJVs is difficult because of their inherent complexity, which makes it hard for firms to disentangle what impacts performance of minority and majority

IJVs, and which knowledge can or cannot be transplanted between the two investment vehicles (cf. Levinthal, 1997; Penrose, 1995). Below, we investigate these effects in more detail, and distinguish, both conceptually and empirically, between minority and majority IJVs as different forms of exploring foreign settings. More specifically, we will argue that when faced with uncertainty, for instance, political risk of the host country (Henisz & Delios, 2001) or cultural differences (Barkema et al., 1996), small stakes in investments (minority IJVs) will be used, which will enhance firm value. However, with more experience in a particular 'cultural block' (for instance, South East Asia, Latin America, etc.; Ronen & Shenkar, 1985), firms will develop better models and more complete knowledge bases about local 'time and place' (Hayek, 1945). This will decrease the uncertainty they face when undertaking new IJVs in that cultural block, making majority IJVs (with the focal foreign parent taking the lead) more likely and more valuable than minority IJVs. Furthermore, we will argue that experience with a particular investment mode (i.e., minority or majority IJVs) will make future investments along those lines both more likely and more valuable, while positive transfers to the other mode will not necessarily occur.

2.5. Hypotheses

Political hazards. Exploration of some countries involves substantial political hazards for foreign firms at the time of entry, for instance due to a weak institutional or legal infrastructure in the host country (Henisz, 2002; Henisz & Delios, 2001). Weak (independent) local institutional and legislative systems imply that it is more difficult for local executives or ruling parties to credibly commit to a certain policy or course of action, which implies additional uncertainty for the foreign firms. This is because changes in (the preferences of) the

local executives or ruling party, or lobbying by host-country competitors or other incumbents, may damage the interests of the foreign firm, as it may be unprotected against such hazards by the local institutional and legislative environment. This imposes additional uncertainty on the firm's local investments (Henisz & Delios, 2001). If an unfavorable state of the world emerged, it might not only lead to expropriation of the firm's assets and profits, but also prevent it from identifying and exercising future investment opportunities in this country after losing the initial toehold.

At the time of entry, the firm does not know whether these political hazards will decrease in the future (i.e., whether a stronger institutional and legislative structure will emerge in the host country) or not. Fearing negative consequences for its ability to generate rents from local operations, the firm is likely to choose a small rather than large stake in an IJV. Moreover, the larger the political uncertainty, the more important it becomes for the firm to avoid the downside risk associated with expropriated assets or lost revenues and profits, making minority IJVs increasingly more valuable compared to majority IJVs. Formally,

Hypothesis 1a: The larger the political hazards of the host country, the higher the likelihood of a minority rather than a majority IJV.

Hypothesis 1b: The larger the political hazards of the host country, the higher the value of a minority stake in an IJV compared to a majority stake.

Cultural differences. Culture has been defined as a 'collective programming of the mind' (Hofstede, 2001; first edition in 1980). Both theory and evidence suggest that national cultures are converging slowly, if at all, and that cultural differences remain a source of hazard for FDI and IJVs in particular (Barkema et al., 1996; Barkema & Vermeulen, 1997;

Hofstede, 2001; Li, 1995). Large differences in cultures imply that the (inexperienced) firm's causal models and routines regarding how to operate in the cultural context of the host country will likely be inappropriate and incomplete. Cultural differences may also be associated with differences in interpretative schemes of the foreign and local IJV partners, which may hamper the flow of information between them (Schein, 1985), and increase the likelihood of misunderstanding and conflict (Schneider & Barsoux, 1997). While this is true for both minority and majority IJVs, cultural differences may be more problematic in the case of the latter. For a majority partner in an IJV, with their large bargaining power (cf. Blodgett, 1992), it is legitimate to exercise larger influence on the IJV's strategic direction as compared to a minority partner (cf. Child, 2002). The majority partner is also more likely to be involved in every-day operations of the IJV, in particular if the local partner is provided with technology or other resources requiring close supervision over the production process and quality (Child et al., 1997). Involvement in daily operations may also imply interactions with local parties, for instance through selection of suppliers, contacts with key costumers, etc. Large cultural differences – particularly when the company has little experience with the local culture – increase the risk of suboptimal strategies being chosen, but also the likelihood of misunderstanding and conflict with the additional local parties as well.

Hence, large cultural differences between the home and host countries of internationalizing companies favor the selection of minority IJVs rather than majority IJVs, as this minimizes their exposure to downside risk, while allowing them to explore and learn about the host countries. At the same time, as more resources are put at risk when expanding through a majority as compared to a minority stake in an IJV, the value of the former will be taxed more than the value of the latter with increasing cultural differences. In short, we expect the following:

Hypothesis 2a: The larger the cultural differences between the home and host countries of the focal firm, the higher the likelihood of a minority rather than a majority IJV.

Hypothesis 2b: The larger the cultural differences between the home and host countries of the focal firm, the higher the value of a minority stake in an IJV compared to a majority stake.

Experience in a cultural block. 'Cultural blocks' are groups of countries with similar national cultures, i.e., with relatively low within-cluster variance of cultures as compared to the variance between clusters (Ronen & Shenkar, 1985; examples include South East Asia, Latin America, Anglo-Saxon countries, etc.). This notion has been strongly advocated (Shenkar, 2001) and empirically validated in prior literature (e.g., Barkema et al., 1996; Gatignon & Anderson, 1988; Park & Ungson, 1997). Importantly, it is consistent with conceptions and strategies of internationalization (Buckley & Ghauri, 2004), which imply that companies often use one country as a test market, and after initial success roll out to similar countries in the region (Barkema et al., 1996; Johanson & Vahlne, 1977, 1990).

Experience in one country in a cultural block endows the company, first of all, with specific knowledge of the particular 'time and place,' about local suppliers, customers, competitors, etc., reducing uncertainty in this domain. Second, local experience is likely to endow the company with increasingly complete and accurate models and routines about how to operate in the local culture. The similarity with the cultures of other countries in the same cultural block implies that (part of the) knowledge and routines will likely be transferable to these other countries as well (cf. Cohen & Levinthal, 1990; Penrose, 1995). Moreover, the local experience may endow the company with better models and routines regarding political systems rooted in the particular belief structures and values associated with the culture. Such

experience may also mitigate political threats if networks are built with local leaders or ruling parties (cf. McGrath, 1999). Participation in such networks reduces the likelihood of assets and future revenues being lost. To the extent that other countries within the same cultural block have similar political systems, institutions- and policy-related aspects of the local experience may be transferable to them as well (e.g., Central and Eastern Europe, Latin America, etc.). For all these reasons, we expect that large experience in a particular cultural block increases the likelihood of selecting majority IJVs rather than minority IJVs, and increases the value of majority IJVs as compared to minority IJVs. Formally:

Hypothesis 3a: The larger the firm's experience in a particular cultural block, the higher the likelihood of a majority rather than a minority IJV.

Hypothesis 3b: The larger the firm's experience in a particular cultural block, the higher the value of a majority stake in an IJV compared to a minority stake.

Expansion mode experience. IJVs are complex investment vehicles. They require the focal company to cooperate with a partner from a different national culture in the context of an alliance, which implies intensive and complex role-playing. In general, experience with a particular expansion mode is associated with improved performance of that mode (cf. Barkema et al., 1997). Hence, we expect that experience with minority IJVs will endow the company with knowledge (causal models and routines) of how to play that role of a minority partner successfully. Such experiences and routines will increase the likelihood and improve the performance of future minority IJVs. Likewise, we expect that experience with majority IJVs will enhance the likelihood and performance of future majority IJVs.

Theoretically, playing one role in an IJV (for instance, as a minority partner) may also serve as a platform for the focal company to learn how to play the other role (for instance, that of a majority party) from observing its partner through vicarious learning (Levitt & March, 1988). However, we expect such learning effects (in terms of better knowledge, routines, etc.) to be weaker than the learning from the focal company's own experience with majority IJVs. First, part of this knowledge is tacit and may only be gained through own experience, where the problems encountered in playing the role induce a search for better solutions (Simon, 1957), which enhances learning and development of better routines. Second, learning from observations of others is more superficial than learning from own experience, and therefore subject to oversimplification, misinterpretation, misattribution, and erroneous inferences; as a result superstitious learning may occur (Levinthal & March, 1993; Levitt & March, 1988), and misapplication of experience is likely (cf. Haleblian & Finkelstein, 1999). Thus, specialized experience gained in one role (for instance, as a minority partner in an IJV) may not only be less useful but even harmful when transplanted to the settings of other roles (for instance, as a majority partner; cf. Haleblian & Finkelstein, 1999; Martin & Park, 2005). Only after having played both roles may firms develop the knowledge (i.e., models and routines) how to operate both minority and majority IJVs, and the knowledge of conditions under which one type of routines, models, etc. applies and when the other. This implies that experience with playing one role is valuable for firms when they choose to play it again, but not necessarily when they choose to play the other role.

While the experience with a particular mode increases the ability to operate that mode, it may also increase the likelihood of using the same mode in later stages (cf. Amburgey, Kelley, & Barnett, 1993), as firms typically seek in the neighborhood of prior problems and solutions for new ways of handling current problems (Cyert & March, 1963; Katila & Ahuja, 2002; Nelson & Winter, 1982). However, continued use of a particular

investment vehicle may not only lead to incremental improvements, but also to inertia and suboptimal choices as a result (cf. Levinthal & March, 1993). Indeed, much experience in a particular role may reduce the company's flexibility to play opposite roles. For instance, companies with much experience in taking the lead in managing IJVs (as in majority IJVs) may have problems allowing partners to be in the 'driver's seat,' to compromise, and to help others succeed. For all these reasons, we expect companies to learn from prior experience with minority (majority) roles how to successfully handle future investments of the same type, and make future investments of the same type more likely and more valuable, as compared to the other type. Formally:

Hypothesis 4a: The larger the firm's experience with majority IJVs, the higher the likelihood of a majority rather than a minority IJV.

Hypothesis 4b: The larger the firm's experience with majority IJVs, the higher the value of a majority stake in an IJV compared to a minority stake.

Hypothesis 5a: The larger the firm's experience with minority IJVs, the higher the likelihood of a minority rather than a majority JV.

Hypothesis 5b: The larger the firm's experience with minority IJVs, the higher the value of a minority stake in an IJV compared to a majority stake.

2.6. Methodology

2.6.1. Sample

We tested our hypotheses on a longitudinal database of all non-financial firms listed on the main segment of the Amsterdam Stock Exchange in 1993.[6] These firms operated in a wide variety of industries, including chemical and pharmaceutical products, paper and packaging, food products, brewing, retailing, publishing and printing, trade, and tank storage. No data were gathered on the four largest firms (Royal Dutch Shell, Unilever, Philips, Akzo) since they differed considerably from the other firms in terms of international experience, scope, and size, leaving 25 companies. We included IJVs over a period of 26 years (1973-1998). The average number of employees of the firms over the sample period was 12,475 and their average sales amounted to EUR 1.7 billion.

We collected data on all 292 IJVs of these firms that were both recorded in their annual reports during the window of analysis and announced in the Dutch financial daily, *Het Financieele Dagblad* (which we used to determine the IJV announcement dates). We found sufficient information about 266 out of these 292 IJVs that allowed us to estimate a logit model for the choice of minority versus majority investment mode. In our firm value creation models, IJV announcements that coincided with the announcements of other ventures of the same company (on the previous, same, or following day) were further excluded from the sample to avoid contamination of the effect of the focal announcement on firm value with other (value-relevant) news. After accounting for the necessary exclusions and any missing data, the sample on which our hypotheses were tested included 266 IJVs in logit analyses and 200 IJVs in firm value analyses.

[6] We selected the firms from the main funds segment (35 firms) to limit the distorting impact of thin trading, a particularly problematic issue when analyzing expansions from the 1970s.

Next, in order to measure experience of the sample parent firms with different cultures and investment vehicles, data on all prior international expansions of these companies undertaken since 1966 were collected from their annual reports. 1966 was chosen as the base year because it marked the beginning of a period of vigorous internationalization of the sample firms, and because older annual reports were difficult to obtain or lacking the required information. Annual reports were also the source of accounting data used in the analyses.

2.6.2. Analysis

Our hypotheses predicted effects of firm- and contextual-variables on both the choice of an investment vehicle and its implications for firm value. Therefore, we began the empirical analyses by estimating a classic logit model for the choice of majority versus minority IJVs, using robust standard errors specification (StataCorp, 2001). The logit model allowed us to estimate the likelihood that a parent firm chooses to enter a foreign market with a majority rather than a minority IJV, conditional on the hypothesized factors. Next, we used the event study methodology to quantify abnormal changes in stock prices of sample firms upon announcements of IJV formations, which we then used as a dependent variable in second-order multiple regressions. Below we explain this second step of our analyses in more detail.

Event study methodology has often been used in strategy research to assess the influence of strategic decisions – such as exploration of foreign markets through IJVs – on firm value (e.g., Anand & Khanna, 2000; Kale et al., 2002). This approach (cf. Fama, 1976; McWilliams & Siegel, 1997) rests on the assumption of semi-strong stock market efficiency. Thus, we assume that changes in share prices around corporate announcements provide unbiased assessments of their economic consequences from the perspective of the company's shareholders (Fama, 1976). In line with the theory and hypotheses developed in this paper, the

use of event study method allows us to capture how much additional value a firm creates when choosing to enter a host country using minority and majority IJVs.

Consistent with most prior research, we calculated abnormal returns using the market model (Fama, 1976; McWilliams & Siegel, 1997). For each IJV, we regressed the company's daily stock returns of each of the sample firms on a benchmark index over a period of 121 trading days (approximately 6 months, from $t = -136$ to $t = -16$, where $t = 0$ was the announcement day of the IJV in *Het Financieele Dagblad*). The benchmark chosen for this study was the Amsterdam Stock Exchange (AEX) index. Since AEX index was only initiated in 1983, stock prices around announcements of IJV formations from the 1973-1982 part of the sample period were regressed on AEX-equivalent index calculated by Datastream, our source of stock market data.[7] Abnormal returns were calculated as a difference between returns predicted by the market model and share prices actually observed on focal trading days. In our regression analyses, we used the cumulative abnormal returns over the days $t = -1$ and $t = 0$ as the dependent variable. Thus, we accounted for potential early information arrival, for instance for IJVs that were announced before the stock market closed on the day prior to the publication in *Het Financieele Dagblad*.

Next, we used the cumulative abnormal returns as the dependent variable in an OLS regression framework, using the White covariance matrix estimator to control for potential heteroskedasticity. Our predictions about the value of minority versus majority IJVs, contingent on the hypothesized factors, were tested as follows. We mean-centered all continuous independent variables. This prevented the occurrence of collinearity problems and facilitated the interpretation of estimation results (Aiken & West, 1991). Each main term (accompanying an interaction term) represented the effect of a variable on the value of

[7] Stock returns were adjusted for capital changes (e.g., stock splits, buybacks, regular capital issues, takeovers) and for dividend payments. The returns were calculated in logarithmic terms to make the departure of daily data from normality less severe (Fama, 1976). Similarly, the benchmark index returns were in logarithmic form.

minority IJVs. The interaction term showed how much the impact of a variable on the value of majority IJVs differed from the effect of this variable on the value of minority IJVs. Hence, the interaction effects allowed direct tests of our predictions of how the value of majority IJVs was influenced by the hypothesized factors compared with that of minority IJVs.

2.6.3. Variables

Minority and majority IJVs. Consistent with prior research into IJVs (for example, Hennart, 1988), we operationalized IJVs as partial stakes in either foreign start-ups or acquisitions – signifying partial rather than full ownership of foreign investments. In line with our theory, the discrete measure of ownership, in the form of minority and majority IJVs, took account of the fact that these IJVs may not only differ in quantitative but also in qualitative terms, with respect to roles and responsibilities (Gatignon & Anderson, 1988; Hennart, 1991; Pennings et al., 1994). Hence, we classified all IJVs in terms of whether they were minority- or majority-owned by the internationalizing firms,[8] using a majority entry dummy variable equal to 1 if the expansion was majority-owned, and 0 otherwise (labeled as minority entries). This dummy was used as a dependent variable in the logit model and as an independent variable in multivariate regressions.

Political hazards. We measured the political uncertainty of a host country using Henisz' (2002) political hazards index (adjusted in such a way that high values implied high political uncertainty, and multiplied by 100). Consistent with our theory, Henisz' time-varying index captures a rich set of characteristics of the institutional and political environments of a particular country in a particular year. The index takes account of checks

[8] Some IJVs were 50% owned. To create mutually exclusive and collectively exhaustive categories, the 50%-owned IJVs were added to the minority category. We did exploratory analysis using 50%-owned IJVs as a separate category. They appeared to be significantly different from majority IJVs and similar to minority ones in terms of effects, consistent with a taxonomy of 50%-owned IJVs as part of the minority IJV category. Exclusion of the 50%-owned ventures from the sample led to similar support for our hypotheses (while reducing sample size).

and balances imposed on local leaders and parties, in the form of independent judges and courts, veto power of legislative chambers, etc., to measure a nation's ability to credibly commit to policies (see Henisz, 2002, for a more extensive description). Hence, the measure captures host country political risk that is particularly relevant for firms exploring foreign markets.

Cultural differences between a host country and the home country (the Netherlands) of internationalizing firms were measured using the Kogut and Singh's index (Kogut & Singh, 1988) based on the four dimensions of culture by Hofstede (1980), i.e. power distance, uncertainty avoidance, individualism / collectivism, and masculinity / femininity. Additionally, sensitivity analyses using the Euclidean and the five-dimensional measures of cultural distance (including long-term orientation dimension; Barkema & Vermeulen, 1997; Hofstede, 2001) were conducted.

Cultural block experience. As was done in earlier studies (Barkema et al., 1996; Gatignon & Anderson, 1988; Park & Ungson, 1997), we used the concept of cultural blocks as defined and measured by Ronen and Shenkar (1985), who synthesized the outcomes of eight earlier studies of culture. We extended their original classification with a post-communist block, which included the countries of Central and Eastern Europe (originally not assigned to any other cultural block). Cultural block experience was measured as the number of prior expansions of a focal firm in the particular cultural block from 1966 onwards.

Majority and minority IJV experience. We operationalized majority IJV experience as the number of prior majority IJVs of the focal firm from 1966 onwards; likewise for minority IJVs.

Control variables. Some countries impose constraints on FDI inflow more than others, restricting the governance modes that foreign firms can choose. Using the International Monetary Fund annual reports on foreign exchange arrangements and

restrictions, we constructed a time-varying dummy variable equal to 1 if a host country's policies restricted FDI inflow and 0 otherwise. Furthermore, in large firms, IJVs may have smaller effects on firm value (measured as abnormal returns) because their market capitalization is greater or because media contacts may be more intensive and news may trickle to the capital market in a more piecemeal way. Hence, we controlled for firm size, using the natural logarithm of the book value of the parent firm's assets, expressed in thousands of Dutch guilders and adjusted for consumer price index changes. We also controlled for the firm's financial leverage (measured as the ratio of total liabilities to assets), since it may affect the firm's performance and ability to invest in new ventures (Jensen, 1986).

Next, we took account of the fact that the effect of the announcement of an IJV may be confounded by other news released by the parent company, which may also influence the stock price. Although such potentially confounding events should be controlled for to avoid potential biases resulting from the so-called (other) event-induced variance and event clustering (Brown & Warner, 1980), few studies in strategic management have actually done so. Hence, we proposed a crude yet tractable method to control for such possible effects. We distinguished between four qualitatively different types of potentially value-relevant announcements (and screened *Het Financieele Dagblad* issues published three weeks prior to and after the announcement date of the focal IJV to determine whether these types of announcements had been made or not): profitability related announcements (for example, profit warnings); announcements of other expansions; changes in the ownership of non-focal ventures; and more general changes in strategy. We then created dummy variables capturing whether a given type of announcement was made by the focal firm around the time when news about establishing an IJV appeared in financial press. Three of these four control variables (coded 1 if the particular type of announcement was made; 0 otherwise) had a

significantly positive impact on cumulative abnormal returns, and hence were kept in our models, jointly explaining 11% of the variance. The means, standard deviations, and correlation coefficients of the variables are presented in Table 2.1.

Table 2.1. Means, standard deviations, and correlations

		Mean[a]	S.d.	1.	2.	3.	4.	5.	6.	7.	8.	9.
1	Abnormal returns	.47%	.03									
2	Political hazards	.63	.18	-.17								
3	Cultural distance	2.70	1.20	-.05	.38							
4	Cultural block experience	9.86	11.47	.15	-.14	-.15						
5	Majority IJV experience	4.98	4.67	-.11	.26	.25	.09					
6	Minority IJV experience	11.07	9.02	-.12	.26	.26	.20	.56				
7	Majority entry	.32	.47	.02	-.13	.08	-.04	.05	-.17			
8	FDI restrictions	.13	.34	-.12	.48	.47	-.13	.21	.30	-.13		
9	Firm size	13.61	.90	-.02	.14	.10	.13	.46	.50	-.16	.13	
10	Leverage	.52	.65	.01	-.13	-.19	.01	-.12	-.14	.01	-.17	.16

[a] Values are for raw (non-centered) variables. Centering has no impact on standard errors and correlation coefficients.

2.7. Results

2.7.1. Hypotheses testing

Results of the logit analysis of the choice between majority and minority IJVs are presented in Model 1 in Table 2.2. The results are consistent with Hypothesis 1a, which predicted that the probability of choosing a majority IJV as opposed to minority IJV was negatively related to political hazards of the host country. We also found support for Hypothesis 3a, implying that the likelihood of majority IJVs increases with experience of a parent firm in the focal cultural block. Firms experienced with playing majority partner roles in IJVs appeared to prefer majority IJVs, as predicted by Hypothesis 4a. Analogously, experienced minority players had a preference for exploring foreign markets through minority IJVs, consistently with Hypothesis 5a. The data did not support Hypothesis 2a, however, implying that cultural differences have no clear impact on firm preferences for one type of IJV over the other.

Table 2.2. Results of logit analysis of the choice of majority IJV versus minority IJV [a]

	Model 1	
Political hazards	-1.73*	(.96)
Cultural distance	.07	(.13)
Cultural block experience	.03*	(.01)
Majority IJV experience	.11**	(.04)
Minority IJV experience	- .04*	(.02)
FDI restrictions	- .49	(.53)
Firm size	- .35†	(.18)
Leverage	.14	(.23)
Intercept	- .60***	(.15)
Wald χ^2	22.51**	
Pseudo R-squared	.08	

[a] N = 266. The robust standard errors are in parentheses. Significance levels are one-tailed for predicted effects and two-tailed otherwise.

† $p < .10$
* $p < .05$
** $p < .01$
*** $p < .001$

Hypothesis 1b implied that the value of minority IJVs compared with that of majority IJVs increases more strongly with the political hazards of a host country. Consistent with this prediction, the results presented in Model 3 (Table 2.3) show that the interaction effect of the majority entry dummy and political hazards is significantly negative ($p < .05$). The coefficient implies, for instance, that on average, as the political hazards of a host country increase by 10 percentage points, minority IJVs create .42% more firm value – or EUR 3.31 million of market capitalization – than majority IJVs. Hypothesis 2b – that the value of minority IJVs relative to that of majority IJVs increases with cultural distance more strongly– is also corroborated (the corresponding effect in Model 4 has the predicted sign, $p < .05$).

Hypothesis 3b – that the value of majority IJVs relative to that of minority IJVs increases with experience in a cultural block – is corroborated as well ($p < .001$, Model 5). The estimation results imply that, on average, when a firm's cultural block experience increases by 1, a majority IJV creates .15% (or, on average, EUR 1.18 million) more value for

Table 2.3. Results of multiple regression analyses of value created by IJVs [a]

	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
Political hazards		-41.53*				-19.65
x Majority entry		(22.77)				(22.17)
Cultural distance			-7.69*			-4.38†
x Majority entry			(3.35)			(2.93)
Cultural block experience				1.49***		1.51***
x Majority entry				(.45)		(.47)
Majority IJV experience					2.68**	2.52*
x Majority entry					(1.12)	(1.12)
Minority IJV experience					-1.96**	-1.82**
x Majority entry					(.65)	(.60)
Majority entry	-1.23	-2.07	-1.73	- .48	-3.86	-3.60
	(4.34)	(4.14)	(4.14)	(3.95)	(4.31)	(3.55)
Political hazards	-4.03	11.13	-6.61	-5.47	-2.02	2.09
	(13.34)	(16.65)	(13.57)	(12.64)	(12.96)	(16.53)
Cultural distance	2.91†	2.67	7.11**	1.91	3.53*	4.75†
	(1.61)	(1.74)	(2.56)	(1.51)	(1.55)	(2.43)
Cultural block experience	.45	.48	.51†	.03	.43	.06
	(.29)	(.29)	(.29)	(.18)	(.30)	(.19)
Majority IJV experience	-.51	-.53	-.49	-.67	-1.16*	-1.28**
	(.49)	(.49)	(.50)	(.48)	(.48)	(.48)
Minority IJV experience	-.53	-.49	-.45	-.41	-.15	.01
	(.32)	(.32)	(.31)	(.28)	(.35)	(.29)
FDI restrictions	-7.18	-7.80	-12.18*	-7.63	-8.29	-11.80*
	(5.66)	(5.70)	(6.15)	(5.49)	(5.42)	(5.74)
Firm size	1.47	1.10	1.16	1.52	2.88	2.46
	(2.88)	(2.92)	(2.88)	(2.49)	(2.81)	(2.54)
Leverage	.68	1.36	1.34	.52	.00	.58
	(1.57)	(1.56)	(1.50)	(1.51)	(1.56)	(1.56)
Intercept	-.98	-1.50	.01	-1.05	-1.92	-1.61
	(2.49)	(2.57)	(2.48)	(2.45)	(2.45)	(2.63)
Confounding events controlled for	Yes	Yes	Yes	Yes	Yes	Yes
F-statistic	2.55*	2.52**	2.53**	3.15***	2.98***	3.31***
R-squared	.19	.20	.21	.27	.23	.33

[a] N = 200. The estimated coefficients and the robust standard errors (in parentheses below the estimates) are all multiplied by 10^3. Significance levels are one-tailed for hypothesized effects and two-tailed otherwise.

† $p < .10$
* $p < .05$
** $p < .01$
*** $p < .001$

its parent firm than a minority IJV. Finally, Hypotheses 4b and 5b – that the value of majority IJVs relative to that of minority IJVs increases with majority IJV experience but decreases

with minority IJV experience – are also corroborated (Model 6). We also estimated a full model (Model 7), which corroborated earlier results, but with Hypothesis 2b now marginally supported and the effect implied by Hypothesis 1b no longer significant.

2.7.2. Additional analyses

In order to assure robustness of the above results, we re-estimated our models using several additional control variables. First, three alternative measures of cultural distance were computed and used instead of the four-dimensional Kogut and Singh's (1988) index: (1) the five-dimensional Kogut and Singh's index (with the long-term orientation dimension of culture accounted for; Hofstede, 2001); (2) the four-dimensional Euclidean index; (3) the five-dimensional Euclidean index. These additional analyses (despite substantially smaller sample size in models with five-dimensional measures of cultural distance due to missing data) rendered results consistent with Hypotheses 2a and 2b.

Next, we included host country's GNP and the growth rate of GNP per capita (which limited the sample to 180 observations owing to missing data) to take into account that rich countries have much spending power and that growing economies may present more opportunities than stagnant ones, which may affect the choice between minority and majority IJVs. The results were very similar to those presented above, while the additional variables turned statistically insignificant. This was also the case when we controlled for overall international experience of firms (measured as number of all prior foreign subsidiaries a firm established between 1966 and the focal IJV formation) and their geographic diversity (measured as number of countries a firm had subsidiaries in at the moment of IJV formation), which was meant to account for their possible impact on firm performance (cf. Goerzen & Beamish, 2003; 2005), and hence their value creation capabilities. We also ran models using year dummy variables; an entry mode dummy (indicating whether the IJV was a greenfield

investment or an acquisition); an unrelated diversification dummy (to account for entries in businesses unrelated to core activities of the parent firms); cultural block dummies, and firm dummies. No significant effects of these additional variables were found and the support for the hypotheses remained unchanged. Next, we estimated a Heckman sample selection model (Greene, 2003) to take into account that firms may first choose between IJVs and fully owned investments (bearing value maximization in mind) before deciding between majority and minority IJVs. However, the Heckman correction factor turned out to be insignificant and the estimation results were equally supportive of our hypotheses as those reported earlier in Table 2.3.

Finally, in order to assure predictive validity of the results presented above, we also explored long-term accounting performance implications for firms using 'correct' strategies (i.e., choosing minority and majority IJVs as implied by our theory), as opposed to firms that did so to a lesser degree. More specifically, for each IJV, based on the logit model (Table 2.2) we simulated which investment vehicle (i.e., majority or minority IJV) would have been 'correct' according to our theory, as a function of actual scores of political hazards, cultural distance, cultural block experience, and firm experience with minority and majority IJVs. Subsequently, following a procedure suggested by Anderson (1988), we compared the simulated mode choice with the actual mode selected by the firm in order to create an index of conformity (ranging from 0 to 1) of the simulated choice to the actual one. Actual choices diverging from simulated ones by at most .5 were labeled 'correct' and received a code of 1; all other cases were labeled 'incorrect' and coded 0.

Next, for each firm in each year, we calculated the percentage of prior 'correctly' designed IJVs (from 1966). We subsequently estimated a model in which the average three-year accounting performance ($ROE_{t=0,\ t=+2}$) was regressed on this percentage of correct past choices (i.e., the 'correctness' of the strategy), the number of prior IJVs of the firm since 1966

(the importance of the strategy for the company), and several control variables (also used in prior similar studies). Since we expected the impact of the number of IJVs on the firm's long-term accounting performance to depend on the 'correctness' of the strategy, we also included an interaction variable. The estimation results are presented in Table 2.4.

Table 2.4. Results of two-way fixed-effects panel regression analysis of firm profitability [a]

	Model 8	
Percent of correctly designed IJVs [b]	.64*	(.32)
Total number of IJVs [c]	-.76	(1.33)
Percent of correctly designed IJVs x total number of IJVs	.13***	(.04)
International experience [d]	-.81	(.52)
Number of foreign expansions [e]	4.48*	(1.86)
Cultural diversity [f]	-7.54	(5.54)
Product scope [g]	-.29	(1.05)
Firm size	-37.15***	(10.61)
Leverage	38.81***	(10.23)
Intercept	60.57***	(8.76)
Year dummy variables	Included	
F-statistic	10.45***	
R-squared	Within: .36	Overall: .23

[a] N = 507 (number of companies times number of years minus lines with missing data). The dependent variable is the average ROE over years *t*, *t* +1, and *t* + 2. Based on the Hausman test, a fixed rather than random effects specification was chosen, as the assumptions of the former would have been violated otherwise. The fixed firm effects are jointly significant (F-statistic = 9.12***). Estimates of the (significant) year-specific effects are suppressed. The estimated coefficients and the standard errors (in parentheses) are all multiplied by 10^3. Significance levels are one-tailed for predicted effects and two-tailed otherwise.

[b] Mean-centered cumulative number of IJVs (up till year *t*), for which the absolute value of the predicted probability of an IJV being majority owned (from Model 1) minus dummy for majority entry < 0.5, divided by the total number of IJVs, and multiplied by 100.

[c] Mean-centered cumulative number of IJVs up till year *t*.

[d] Mean-centered cumulative number of foreign expansions up till year *t*-1.

[e] Mean-centered number of foreign expansions in year *t*.

[f] Mean-centered number of cultural blocks in which a firm was active in year *t*.

[g] Mean-centered number of different 3-digit industry codes in which a firm was active in year *t*.

$^{\dagger} p < .10$
$^{*} p < .05$
$^{**} p < .01$
$^{***} p < .001$

The results showed that the more 'correct' strategies do indeed imply better long-term accounting performance ($p < .05$) in terms of average three-year ROE following the expansion. The effect of the number of IJVs on the firm's long-term accounting performance runs through the correctness of the strategy suggested by our theory (i.e., the interaction term has the expected positive sign, $p < .001$). The estimation results imply, for instance, that companies which make 90% of their strategic choices 'correctly' at a number of IJVs that is two standard deviations above the mean, have a 9 percentage point higher profitability than firms which make half of their choices 'correctly' at an average number of IJVs (predicted ROEs of .22 and .13, respectively). In sum, companies acting in line with our theory are not only rewarded by investors, but also (much) more profitable over long periods of time.

2.8. Discussion and conclusions

Many firms are internationalizing nowadays, often in a race with rivals to get to new countries and regions first, in their quest to become one of the global players in their industries and survive in the long run. Not all of them are successful. In this paper, building on prior research we reasoned that exploratory expansions into foreign countries – such as minority and majority IJVs – may be characteristic of the successful firms. We argued that minority and majority IJVs differ in important ways, both quantitatively and qualitatively. The quantitative difference – that in equity stake – implied different amounts of resources committed to IJVs by parent firms, and hence, *ceteris paribus*, different extents of exposure to risk. The qualitative difference – that in roles played by the partners – implied that experiences with one investment vehicle are not necessarily transplantable to the other. These

differences, we argued, impact managerial choices and firm value creation capabilities associated with minority and majority IJVs.

The empirical evidence presented in this paper largely corroborated our conjectures concerning the choice and value created by minority and majority IJVs, contingent on political and cultural hazards, and on the firm's experience with particular cultures and investment modes. The last result – about learning from minority and majority IJV experience – was consistent with and extended earlier studies suggesting that minority and majority IJVs differ in terms of roles, responsibilities, and capabilities (cf. Child, 2002; Child et al., 1997; Dhanaraj & Beamish, 2004; Pennings et al., 1994). We argued that different models of role-playing are needed, and that firms learn in particular from prior expansions of the same type.

The combined theory and evidence suggested that the gains from experience are likely to be confined to areas closely related to past experience. This implies that it matters how organizational experience is measured, and that we need more fine-grained measures of experience to unpack the role of experience. More research is needed in this respect. For example, transferability of experience between scale and link alliances (cf. Dussauge, Garrette, & Mitchell, 2000, 2004; Hennart, 1988) promises to be an interesting avenue for future studies. Also, future in-depth research into role-playing by partners in minority and majority IJVs, and how their roles evolve over time as equity positions evolve (cf. Ariño & de la Torre, 1998; Hagedoorn & Sadowski, 1999; Kogut, 1988; Lyles, 1988; Makhija & Ganesh, 1997; Reuer, Zollo, & Singh 2002; Schaan, 1988) may prove fruitful.

Another set of evidence that we provided in this paper allowed us to conclude that internationalizing companies which actively explored foreign markets through IJVs were not only rewarded by investors – in terms of higher firm value – but also showed superior profitability over long periods of time, provided they selected minority and majority IJVs in

accordance with the theoretical predictions developed in this study. This issue will become increasingly relevant, from a managerial perspective, if companies across the globe maintain the trend of the last decades to increasingly invest in new countries and regions (for example, South East Asia) and if political instability remains an important issue. From methodological standpoint, these additional analyses provided support for the claim that our theory – and the event study methodology – have predictive validity. Future strategy research may benefit from using this and other combinations of methods to empirically validate theoretical predictions.

While most of our hypotheses were consistently supported by the data, one puzzling result is that cultural differences appear to influence firm value changes associated with formations of minority and majority IJVs, but seem unrelated to managerial choice for one investment vehicle over the other. A possible interpretation of this set of results is that decision-makers in internationalizing firms do not consider cultural differences as particularly relevant (unlike stock market investors). This interpretation is consistent with prior findings that managers (like other people) tend to underestimate problems (Kiesler & Sproull, 1982) and overestimate their own capabilities, particularly when faced with complex tasks (Tversky & Kahneman, 1974). There is much anecdotal evidence that some managers underestimate the problems of investing in different cultural settings (for instance, through acquisitions), leading to dramatic problems which must later be repaired at high costs. Investors, being distanced from individual firms and expansions, and not personally involved in strategic decisions, may be less prone to such biases when considering value implications at the time of the decision. More research is needed before definite statements can be made in respect of this issue.

As an extension of this study, it is interesting to note that firms that internationalize successfully, do so using strategies similar to those of companies operating in

hypercompetitive industries: exploration, 'probing,' cooperative ventures, etc. (cf. Brown & Eisenhardt, 1997). This may be a self-reinforcing phenomenon, where firms engage in experimentation in response to environmental pressures, thereby perpetuating turbulence in the environment (Bogner & Barr, 2000; Mody, 1993). Indeed, managers of firms operating in turbulent environments may continue to act as 'programmed' and keep focusing on trial-and-error learning and new product and process development even after turbulence from the external environment diminishes (Bogner & Barr, 2000). The senior managers of companies that internationalized successfully through exploratory investments may behave analogously: they may have this process ingrained in their behavioral models and routines. After their companies emerge as global competitors and begin competing worldwide, this process may extend to exploration in other domains, for instance technologies. This suggests a mechanism for why globalization leads to more turbulence, change, and uncertainty – even in mature industries – in terms of faster development of new products and processes and faster erosion of competitive advantage as a limited number of global competitors remain. These implications may be explored in future research.

Naturally, this study is not without limitations. First, we examined firms internationalizing from one home country (the Netherlands). Companies rooted in different national cultures may differ in their propensity to engage in entrepreneurial behavior when faced with change and potential failure (Bogner & Barr, 2000), as well as in their ownership and control preferences (Child et al., 1997; Delios & Beamish, 2004; Erramilli, 1996; Hennart & Larimo, 1998; Noorderhaven & Harzing, 2003). Even the sample firms showed considerable variation in terms of their propensity to explore international environments through majority or minority IJVs (see, for example, the high variance in the numbers of IJVs in Table 2.1), with firms that actively explored the international environment in the predicted ways creating more firm value and showing superior accounting performance. Future research

may explore to what extent the findings from our study can be generalized to other cultural settings.

Furthermore, due to limited availability of data on actual equity holdings, we were not able to account for potential heterogeneity of IJVs within the minority and majority IJVs categories. Intuitively, one may expect that there exist important differences in roles played by partners holding close to half of the equity (for example, 49%) and partners holding much more or much less than that (for example, 30%). Conceptual and empirical analyses of such potential heterogeneity and its relationship with firm performance (cf. Blodgett, 1992) would clearly add to the findings of the current study.

Finally, we focused on IJV formations. However, IJVs are inherently unstable in terms of their governance structures (Kogut, 1988; Reuer & Ariño, 2002). Developing theory and providing evidence regarding changes in IJV governance structures over time, including their buy-outs, from the perspective of firm experience with role-playing, may be another interesting area of future research.

Chapter 3

Unpacking international experience: Foreign expansion, firm value, and role of host country factors

3.1. Abstract

Building on organizational learning theory, prior research into the role of international experience of firms has typically advocated its positive impact on organizational performance. Yet, several key insights from this theory – such as that experience may be inadequate and misapplied – were overlooked. We build on these insights to unpack the concept of international experience into two more relevant items: its depth and breadth. The positive role of experience depth is expected to be reinforced by its breadth. We also expect that experience from particularly demanding countries (with respect to political hazards, macroeconomic conditions, and cultural differences) is beneficial when expanding into similarly challenging countries. Conversely, past experiences from non-challenging countries have a liability effect on expansions into particularly demanding locations. Empirical tests on a sample of 425 foreign expansions of 25 multinationals over the period of 1982-1998 corroborate some of our predictions, while revealing areas in need of further investigations.

3.2. Introduction

In the new 'competitive landscape' where new markets are opening up, technologies are rapidly developing, and increasingly many cross-border relationships are being established (Bettis & Hitt, 1995; Hitt et al., 1998), many firms find themselves operating in globalized, hypercompetitive environments (Barkema et al., 2002; Mitchell et al., 1993). As a result, the complexity of the tasks that managers of internationalizing firms are confronted with greatly exceeds the challenges associated with organizational design (cf. Levinthal & Warglien, 1999), diversity (cf. Hitt, Hoskisson, & Kim, 1997), and interdependencies among firm-specific and environmental characteristics (cf. Rivkin & Siggelkow, 2003) they would face in a domestic setting.

Hence, many studies have explored the factors that make firms successful when expanding and operating internationally. Among those, variables such as profitability, subsidiary survival, sales growth, perceived cost of internationalization, and shareholder wealth have been considered as measures of firm success (e.g., Autio, Sapienza, & Almeida, 2001; Barkema, et al., 1996; Delios & Beamish, 2001; Eriksson, et al, 1997, 2000; Hitt et al. 1997; Li, 1995; Luo & Peng, 1999; Markides & Ittner, 1994; Shaver, Mitchell, & Yeung, 1997; Vermeulen & Barkema, 2002). Much of this literature has advocated and provided evidence for the positive role that foreign experience plays in parent firm and subsidiary performance in the process of international growth (e.g., Delios & Beamish, 2001; Luo & Peng, 1999; Markides & Ittner, 1994; Shaver et al., 1997). Yet, inconclusive findings also abound. Doukas and Travlos (1988) found that host country experience of multinationals was insignificantly related to abnormal stock returns upon announcements of their foreign acquisitions. Li (1995), in his analyses of U.S. pharmaceutical industry, found an insignificant relationship between foreign subsidiary exit rates and prior experience of their parent firms in

the U.S.A. Similarly, the Child, Chung, and Davies (2003) study revealed that performance of cross-border units in China was insignificantly related to firm experience in this country. Also, in their study of subsidiary survival, Barkema et al. (1996) found no universal learning effects associated with previous foreign investments in general, or with previous expansions into specific host countries or cultural blocks in particular (cf. Ronen & Shenkar, 1985). Such findings raise a question whether and under what circumstances we should indeed expect foreign experience to render the positive effects advocated in prior studies of firm internationalization, that is what sorts of international experience and under what conditions are truly valuable for internationalizing firms.

Organizational learning theory offers valuable insights in this respect. It suggests that firm experience can be a mixed blessing. First, *redundant* experience may possibly result in competency traps and harmful lack of experimentation (Levitt & March, 1988; March, 1991). Second, experience that is *inadequate* relative to the environment may possibly lead to misapplication of prior experience, inability to absorb a new experience, and / or need to 'unlearn' or abandon current routines (resulting from prior experiences) before developing new ones (Bettis & Prahalad, 1995; Cohen & Levinthal, 1990; Huber, 1991; Levitt & March, 1988). Consistent with these ideas, prior research in the strategy field showed that performance-enhancing effects of experience should not be taken for granted, as the applicability and quality of organizational experience is likely to be determined by the heterogeneity, novelty, and regularity of occurrence of certain events (e.g., Baum & Ingram, 1998; Haleblian & Finkelstein, 1999; Hayward, 2002; Ingram & Baum, 1997).

Bringing these insights to the field of international business, our study aims to contribute to the extant literature by reconciling the relationship between international experience and firm value, with particular attention being paid to experience content (cf. Fiol & Lyles, 1985) or structure (cf. Levitt & March, 1988) as well as contexts in which it is

gathered and deployed. Unlike prior studies of international experience, in our analysis we explicitly incorporate the above-mentioned insights from organizational learning theory that experience-based routines may potentially lead to problems such as inertia, competency traps, or misapplication (cf. Haleblian & Finkelstein, 1999; Hannan & Freeman, 1977; Levitt & March, 1988; Nelson & Winter, 1982). Furthermore, we propose that the diversity of experience can help firms to avoid these potential problems.

We also explore potentially important contingencies for the beneficial impact of international experience on value creation in foreign operations, i.e. for the adequacy of experience relative to the environment (Levitt & March, 1988). Prior research typically assumed that international experience leads to more efficient exploration and exploitation of foreign markets, irrespectively of the characteristics of the foreign markets and the type of experience a firm relies on when expanding abroad. Our study addresses this conjecture by arguing that the contextual factors, such as environmental turbulence or novelty (Brown & Eisenhardt, 1997; Johanson & Vahlne, 1977), may moderate the relationship between prior international experience and firm performance in the process of foreign expansion.

More specifically, we unpack the concept of international experience into two more relevant items capturing the nature of its content (cf. Fiol & Lyles, 1985; Levitt & March, 1988): the depth and breadth (cf. Huber, 1991; Zahra, Ireland, & Hitt, 2000). *Depth* refers to the mastery of a firm's routines (Zahra et al., 2000) developed as a result of setting up and running foreign subsidiaries in a given host country. *Breadth*, on the other hand, refers to the multitude of diverse cultural, institutional, and macroeconomic settings that the firm has experience in, as evidenced by its prior expansions into different countries. Taking a contingency perspective, we offer an explanation for prior inconsistent findings regarding the relationship between international experience and firm performance. We propose that prior experience is particularly valuable when it is simultaneously deep and broad. We also reason

that international experience enhances firm value creation capabilities provided it is adequate relative to the type of environment (for instance, economically stable or not, culturally remote or proximate, etc.) the firm expands into. Conversely, we argue, international experience, if misapplied, may become a liability for the firm (cf. Haleblian & Finkelstein, 1999).

The above conjectures were tested on a sample of 425 foreign expansions of 25 firms over a period of 17 years (1982-1998), using a 3-step methodology. In the first step, we used the event study method to estimate how much shareholder wealth was created with new foreign expansions. In the second step, two corrective terms were generated to account for (1) entry mode choice and (2) selection of observations based on availability and quality of data needed to generate the dependent variable. In the final step, second-order sample-selection corrected regression models were run to test our hypotheses. The empirical evidence corroborated some of our predictions, while revealing areas in need of further investigations.

3.3. Background

The idea that organizations are capable of learning from their experiences is one of the key tenets of the behavioral theory of the firm (Cyert & March, 1963; Fiol & Lyles, 1985; Levitt & March, 1988). It has been intensively exploited in prior research on foreign growth of firms (e.g., Barkema et al., 1996; Delios & Henisz, 2003; Eriksson et al., 1997, 2000; Johanson & Vahlne, 1977; Vermeulen & Barkema, 2002). An underlying assumption in these studies has been that while internationalizing, firms aim to reduce uncertainty. This reduction of uncertainty – or increase in confidence – has been said to occur thanks to firm's knowledge of a foreign market, as well as its capabilities to operate and further expand in that particular market and in foreign markets in general (Barkema at al., 1996; Eriksson et al., 1997, 2000;

Johanson & Vahlne, 1977). Hence, foreign growth has been seen as a learning process (cf. Cyert & March, 1963; Casson, 1994), where firms gradually improve their routines, increase their capacity to 'absorb' new (related) international experience, and become more competent and confident in their capabilities; this should allow them to expand successfully within countries where they have already established their presence and into gradually more 'psychically' remote locations (Autio et al., 2000; Barkema et al., 1996; Chang, 1995; Cohen & Levinthal, 1990; Davidson, 1983; Johanson & Vahlne, 1977). These ideas led prior research to conclude that international experience is valuable.

Yet, recent evidence shows that 80% of sales of the world's 500 largest multinationals (responsible for 90% of world's stock of FDI) are only in their home region of North America, the European Union, and Asia 'triad' (Rugman & Verbeke, 2004). Apparently, even the most experienced companies do not maintain operations in a wide variety of countries. This observation underscores the idea that firms that rely on their experience when expanding abroad may face the issue of its applicability, i.e. the adequacy of its content relative to a local context (cf. Fiol & Lyles, 1985; Levitt & March, 1988). In fact, organizational learning theory suggests that different types of learning are likely to take place in stable and predictable environments, than in changing and unfamiliar environments. In the former case, repetitive actions of firms lead to routinization and desired efficiency gains. However, in changing and novel environments, in order to survive firms not only need to incrementally improve their routines, but also to 'experiment' so as to induce higher-level learning and develop new routines (Fiol & Lyles, 1985; March, 1991). This suggests that experience from one foreign market may not necessarily be transferable to another market (cf. Mitra & Golder, 2002). This also implies that experience gathered in one market under certain circumstances may be inapplicable to the same market when conditions in this market change. If firms erroneously generalize their experiences and apply them in novel investment situations or under changed

environmental conditions, negative performance outcomes are likely to follow (cf. Haleblian & Finkelstein, 1999).

Prior literature suggests two plausible explanations for why such incorrect use of past experience may take place. First, competency traps and inertia are likely to occur (Levitt & March, 1988; Miller & Chen, 1994), in particular when the use of a certain routine has contributed to firm's success over extended periods of time in the past. Prior successes reinforce organizational routines, and may lead to overconfidence and misapplication of past experience to novel investment situations. Second, superstitious learning may occur (Levitt & March, 1988), i.e. experience may be misapplied as a consequence of misinterpretation of or erroneous inferences from past events. Additionally, existence of slack resources within a firm, or risk reduction or empire-building ambitions of its managers (cf. Amihud & Lev, 1981; Seth, Song, & Pettit, 2000), may encourage vigorous foreign expansion without sufficient attention being paid to actual competencies, which must be relied on while internationalizing. Absent relevant experience, the above may lead to misapplication of available experience, particularly when managers are overconfident in their capabilities and / or not aware that past experience may be inapplicable.

Still, even if the relevance of prior experiences is correctly discerned (i.e. experiences are not used if they are not relevant), when faced with environmental changes or in novel investment situations firms may find themselves lacking adequate experience to rely on (Levitt & March, 1988). Moreover, firms may have to first 'unlearn' or forget their prior experiences before new routines and behavioral models can be developed and accepted (Bettis & Prahalad, 1995; Hedberg, Nystrom, & Starbuck, 1976; Huber, 1991). This may put them at a disadvantage with younger and inexperienced firms, for instance (Autio et al., 2000). Thus, organizational experience and the resulting routines, while helpful in general, may become a liability in changing or unfamiliar environments.

The above insights from the organizational learning theory suggest that the view traditionally held in the international business literature that prior experiences make firms more successful in expanding abroad within and across countries, requires refinement. Arguably, it is not only the abundance of international experience but also its adequacy relative to the environment (cf. Huber, 1991; Levitt & March, 1988) that matter for firms' abilities to successfully expand into diverse foreign markets. If firms have abundant yet inadequate foreign experience that nevertheless reduces the uncertainty they perceive when investing abroad (cf. Davidson, 1983), it may leave them misleadingly confident in their capabilities, and increase the likelihood of failure (cf. Haleblian & Finkelstein, 1999). Thus, from the viewpoint of an internationalizing firm, it becomes critical to identify what sorts of international experience are indeed adequate (and valuable) when expanding into diverse host countries, and under what conditions.

3.4. Theory and hypotheses

A widely accepted benchmark for firm's success nowadays is the ability of its leadership to create firm value as perceived by capital providers, analysts, media, etc. Hence, the central concern in the present study is the role of international experience as a key facilitator of value-generating international expansion, subject to environmental contingencies. When addressing this issue, below we delineate two relevant dimensions of the international experience concept, and account for three fundamental and much-studied features of the host country environments: the stability of policies, macroeconomic uncertainty, and cultural differences (cf. Zaheer, 1995).

3.4.1. Types of international experience

International experience of firms is a primary source of organizational learning leading to reduction of uncertainty in the process of foreign growth (cf. Johanson & Vahlne, 1977; Penrose, 1995). It helps managers to understand local peculiarities, such as policies, economic conditions, culture, consumer needs and preferences, ways of dealing with local parties, etc. (Barkema et al., 1996; Li, 1995). Such knowledge, therefore, mitigates the problems typically arising from cultural, political, and economic differences, and other sources of 'liability of foreignness' (Hymer, 1976; Zaheer, 1995). Local experience helps firms to obtain and absorb additional information, which in turn fosters efficient scanning for and selection of new valuable opportunities in this location. Hence, thanks to local experience, firms are not only able to operate efficiently in the focal market, but also to keep track of new developments and valuable opportunities there. Such a profound understanding of a market can be gained for example through interactions with local parties in the process of establishing and running multiple subsidiaries there, preferably over relatively long periods of time (cf. Ingram & Baum, 1997).

Thus, when establishing a new foreign venture, a firm is likely to increase the wealth of its shareholders by leveraging its knowledge, capabilities, and routines in this venture, but also by being able to identify and exercise particularly valuable investment opportunities locally. This beneficial effect of prior presence in a market on value created with the new expansion is weaker, the lower the degree to which this venture resembles past experience, i.e., the less applicable past experience is, for instance because of obsolescence. Moreover, lacking adequate routines for doing business locally, managers are likely to search for new solutions in the neighborhood of what they know from prior expansions (Cyert & March, 1963; Johanson & Vahlne, 1977; Levitt & March, 1988). Hence, the more novel the expansion event is (i.e., the more it diverges from what is recorded in the current experience

base of the firm and in the minds of its managers), the more difficult it becomes to find appropriate solutions for problems encountered locally and to run the new foreign venture. There may also arise a need to abandon prior routines before developing new solutions. From this perspective, past experience may become ballast for the firm. In such cases it is likely that the new expansion would divert the firm's resources from other – potentially more productive – uses, and hence would not contribute to the value of the firm.

Arguably, the extent to which a new investment event diverges from what is recorded in the current experience base of the firm depends on how well the firm knows the local environment, whether this environment is stable or turbulent, and how much experience the firm has with other, similar and dissimilar environments. Failure to generate value when expanding abroad may be not only due to the firm's insufficient (or insufficiently related) experience, but also due to experience which is erroneously generalized and applied (Baum & Ingram, 1998; Haleblian & Finkelstein, 1999). In this respect, organizational learning theory suggests that diverse experiences from a variety host of countries are helpful (cf. Barkema & Vermeulen, 1998). Diversity of experiences is likely to make internationalizing firms better aware of potential differences among host countries, for instance with respect to policies and macroeconomic conditions, their stability, as well as national cultures. This awareness can help managers avoid undue confidence, as well as misinterpretation and misapplication of their past experiences to those new investment situations to which these experiences do not apply. Diverse experiences may also be beneficial as they provide a basis for absorption and deployment of new knowledge, by increasing the likelihood that incoming information would relate to what the firm already knows (Cohen & Levinthal, 1990). Moreover, diverse experiences provide multiple starting points in the neighborhood of which the firm may search for solutions to problems encountered in a novel investment situation (cf. Cyert & March, 1963).

Finally, a broad experience base makes it more likely that a firm would not find itself tied down by its current set of host country specific competencies if a major change in the local environment occurred. For instance, a change in macroeconomic conditions, such as was the case for Central and Eastern European countries in 1989-1991, or a change in government policies, such as in the case of these countries upon their accession to the European Union, might invalidate some of the experiences and routines developed and used by foreign firms in those countries prior to the changes. In the situations above, post-change experiences from other countries in the region or from the 'old' European Union countries might be helpful to the foreign firms.

The above discussion suggests that there are two distinct attributes of international experience underlying its structure (cf. Levitt & March, 1988) that are both needed in order for a firm to create value while internationalizing: the depth and the breadth. The depth of international experience results from repetitive actions and operations in a particular host country. It helps the managers to develop stronger routines applicable when doing business in the focal host country, and to scan the local environment for threats and opportunities more efficiently.

The breadth of international experience, on the other hand, is built when a firm expands and operates in diverse as well as dynamically evolving environments. Arguably, experience from heterogeneous countries, or countries where the operating conditions change sufficiently to provide a firm doing business there with a range of diverse experiences, allows the firm to develop a better understanding of differences likely to occur across markets or types of countries. This makes the managers more likely to correctly judge which of the firm's prior experiences can be used, and which should be disregarded, while expanding abroad (cf. Haleblian & Finkelstein, 1999). Hence, diversity of experience safeguards against misapplication of prior experiences to novel investment situations, i.e., it helps to discriminate

among the relevant and irrelevant experiences, when investing in multiple countries, but also when operating conditions in a focal country change substantially.

In sum, we argue that the capability to distinguish the relevant experiences from the irrelevant ones is key to successful deployment of past experience in any new expansion, and therefore also key to successful, value-generating internationalization. Hence, the breadth of international experience is a desired complement to host country experience. Formally, we expect the following:

Hypothesis 1: The depth of a firm's experience in a host country relates positively to firm value created with a new expansion in the focal country.

Hypothesis 2: The broader a firm's international experience, the more positive is the impact of the depth of the focal country experience on firm value created with a new expansion in this country.

3.4.2. Role of host country factors

Our theory so far suggests that the effect of past experience on performance of internationalizing firms depends on the stability of and dissimilarities among host country environments. Indeed, host country specific factors are among the most studied determinants of foreign expansion performance. The differences between the home and the host countries are fundamental determinants of the liability of foreignness and the resulting challenges that managers of internationalizing firms face (Hymer, 1976; Zaheer, 1995). The extent to which a country's environment encourages foreign investors and promises high performance has been shown to depend on numerous factors, like macroeconomic conditions (Kwon & Konopa, 1993), legal restrictions or trade barriers (Chang & Rozenzweig, 2001; Gatignon & Anderson,

1988), political risk (Delios & Henisz, 2003), and cultural differences (Barkema et al., 1996). We group these factors into three major categories: political hazards, economic risk, and cultural differences, and investigate their relationship with firm value created with new foreign ventures, conditional on international experience of firms, as discussed and hypothesized subsequently.

Political hazards. Internationalizing into some countries involves more political risk for the expanding firms than into others. This may be due to a weaker institutional or legal infrastructure, an unstable or heterogeneous power base of the ruling political party, and other factors (Delios & Henisz, 2003; Henisz, 2002). In such countries, there is high likelihood that a major change in government policies may occur and invalidate a firm's routines developed while doing business in the focal country under current policies. Irrespective of whether such policy changes would improve or deteriorate operating conditions in the focal country, past experience of the firm may turn (partly) irrelevant, and lead to negative performance outcomes if misapplied when further expanding in this country (cf. Haleblian & Finkelstein, 1999). However, if managers of this firm developed an understanding of other politically hazardous countries, it is more likely that they will also understand the implications of policy changes in the focal country. As a result, the managers will correctly discern the relevance of their past experience. Moreover, they may rely on their relevant experiences from those other politically hazardous countries while expanding to the focal hazardous country. Hence, there is value to past (applicable) experience from other politically hazardous countries; the more so the riskier the focal country is. On the other hand, experiences from non-focal politically stable countries, if misapplied, may harm the value of a new expansion in a politically hazardous country. The higher the political hazards, the less applicable past experiences from

politically stable countries are, and the larger is the potential liability effect that such experience may have on firm value. Hence, we expect the following:

Hypothesis 3a: The higher the political hazards of a focal host country, the more positive is the relationship between past experience from non-focal politically hazardous countries and firm value created with a new international expansion.

Hypothesis 3b: The higher the political hazards of a focal host country, the more negative is the relationship between past experience from non-focal politically stable countries and firm value created with a new international expansion.

Economic risk. Internationalizing firms may also be concerned with other sources of host country risk besides government policies: for instance, the fluctuations in and prospects for the macroeconomic conditions in that country (Miller, 1992). The economic performance of the country, access to capital markets, country debt indicators, inflation rate, exchange rates, etc., all impact the ways in which firms do business there. The macroeconomic factors influence purchasing power of consumers, growth and size of the focal market, availability of skilled and / or cheap labor, infrastructure, as well as the likelihood of strikes, social overthrows, etc. Economic risk taxes the value of the resources invested in the focal country, and may lead to devaluation of income generated in this country. A firm is likely to avoid these problems when it has sufficient knowledge regarding the focal economy (Hypothesis 1).

Moreover, experiences from countries of similar macroeconomic stand as the focal country help the managers to correctly predict the implications of economic risk for the value of new expansions there, and to manage them more successfully. This is particularly valuable when there is much to lose, for instance when economic risk is high. On the other hand, past

experiences from economically stable countries, if misapplied to ventures into economically risky locations, may harm the shareholder wealth. Arguably, such potential misapplication is more harmful the larger the divergence between past experiences and current conditions in the host country, i.e. the higher the economic risk given the level of experience from economically stable countries. Hence, we predict the following:

Hypothesis 4a: The higher the economic risk of a focal host country, the more positive is the relationship between past experience from non-focal economically risky countries and firm value created with a new international expansion.

Hypothesis 4b: The higher the economic risk of a focal host country, the more negative is the relationship between past experience from non-focal economically stable countries and firm value created with a new international expansion.

Cultural differences. Although a popular belief suggests that habits such as food, fashion, etc., are homogenizing across the globe (Levitt, 1983), both theory (Hofstede, 2001) and empirical evidence suggest that the underlying cultural traits (values, belief structures, etc.) are converging much more slowly, and that cultural differences are as destructive for foreign investments as ever before (Barkema et al., 1996; Li, 1995, Zaheer, 1995). Lack of knowledge of a local culture implies that the firm does not know what 'works' locally, for instance when interacting with local parties. This is particularly so if differences between the home country of the expanding firm and the host country are large in this respect.

Hence, firms internationalizing into culturally distant countries are likely to benefit particularly from prior experiences in those specific countries. They are also likely to find experiences from other similarly distant countries to be useful, regardless of whether these

distant countries are alike each other or not. This is because when operating in culturally remote locations, firms are likely to be aware of the potential cultural differences and their consequences for shareholder wealth possibly created with new expansions. Prior experience in other culturally distant countries also helps firms to discriminate between the experiences that should and should not be applied to a new expansion in another culturally remote country. The higher the cultural distance, the more valuable such capabilities are. Conversely, the higher the cultural distance, the less use there is of experiences from culturally proximate countries, and the more likely is the liability effect of these past experiences. Formally:

Hypothesis 5a: The larger the cultural distance between the home and the host countries, the more positive is the relationship between past experience from non-focal culturally remote countries and firm value created with a new international expansion.

Hypothesis 5b: The larger the cultural distance between the home and the host countries, the more negative is the relationship between past experience from non-focal culturally proximate countries and firm value created with a new international expansion.

3.5. Methodology

3.5.1. Sample

To test the hypotheses, we collected data on foreign expansions of companies listed on the main segment of the Amsterdam Stock Exchange. No data were gathered on expansions of financial institutions and the four largest firms (Royal Dutch Shell, Philips, Unilever, Akzo), as they differed considerably from the other firms in terms of scope of activities, size, as well

as international experience. Out of the remaining companies, 25 expanded abroad at least once over the sample period (1982-1998) and thus entered our sample. Two of these firms went bankrupt before 1998; hence, the sample should not suffer from survival bias. The companies were active in a wide variety of industries, for instance, the manufacture of paper and packaging, office equipment, pharmaceutical and chemical products, food products, brewing, retailing, trading and tank storage, and publishing and printing. Over the sample period, the average number of employees of these firms exceeded 14,000, and their average sales equaled EUR 2.160 billion.

We collected data on all foreign ventures of these companies that were announced in the Dutch financial daily, *Het Financieele Dagblad*. In order to exclude pure portfolio investments from the analyses, the press releases were compared with lists of actively managed subsidiaries published by the sample companies in their annual reports. A total of 592 foreign ventures recorded both in financial press and annual statements were identified. We then used the press announcement dates to measure value created by a parent firm with a new expansion, using the event study methodology. Disclosures of venture formations that coincided with announcements of other expansions of the same company (either on the previous, the same, or the next day) were excluded from analyses to avoid the distorting effects of contamination on the focal announcements. After accounting for missing data, the sample used to test the hypotheses was reduced to 425 observations.

Next, in order to quantify international experience of the parent firms, data on their prior international expansions undertaken since 1966 were collected from their annual reports. We chose 1966 as the base year because it marked the beginning of a period of considerable foreign growth for the Dutch companies in the sample, and because older annual reports were often concise (i.e., lacking the required information) and / or difficult to obtain. Annual statements were also the source of accounting data used in the analyses.

3.5.2. Analysis

In order to test the hypotheses concerning the firm value created upon international expansions, we employed a three-step methodology. In the first step, we used the event study approach to generate the dependent variable. In the second step, two sample selection correction terms were estimated in order to empirically account for the potentially endogenous choice between partly or wholly owned ventures as well as for selection of observations depending on availability of data needed to generate the dependent variable (i.e., for the fact that not all new ventures listed in annual statements of the sample companies were also announced in financial press). Finally, in the third step, we estimated a series of second-order regression models, in which we tested our hypotheses on the value created through new foreign ventures. Below we explain the three steps in more detail.

Step 1: Event study. In order to obtain the dependent variable, i.e. firm value created through international expansion, we used the event study method. This approach (cf. Fama, 1976; McWilliams & Siegel, 1997) rests on the assumption of semi-strong stock market efficiency, i.e. it is assumed that changes in share prices around corporate announcements provide unbiased assessments of their economic consequences from the perspective of the company's shareholders (Fama, 1976). The method (and the stock market efficiency assumption) has received extensive empirical support in finance literature (Fama, 1998; Malkiel, 2003), and has also been often used in strategy research (McWilliams & Siegel, 1997) as a tool to assess how firm value is influenced by strategic decisions. There is considerable evidence in prior literature that event study method has predictive validity; abnormal stock returns have been shown to correlate with both accounting-data based measures of performance and subjective managerial evaluations of success of strategic decisions (e.g., Healy, Palepu, & Ruback, 1992; Kale et al., 2002). Importantly, this method is conceptually superior to approaches taken in

those prior subsidiary-level studies that used for example manager satisfaction surveys or subsidiary survival analyses to quantify a foreign venture success. This is the case since the event study method allows us to capture how much additional (extra) value a new foreign venture creates for a firm, rather than how the venture performs on its own.

Consistent with most prior research, we calculated abnormal returns using the market model (Fama, 1976; McWilliams & Siegel, 1997). For each new expansion, we regressed the company's daily stock returns on the benchmark Amsterdam Stock Exchange (AEX) index over a period of 121 trading days (approximately 6 months, from $t = -136$ to $t = -16$, where $t = 0$ was the announcement day of the new expansion in *Het Financieele Dagblad*).[9] Abnormal returns were calculated as a difference between returns predicted by the market model and share prices actually observed on focal trading days. In the regression analyses (Step 3), we used the cumulative abnormal returns over the days $t = -1$ and $t = 0$ as the dependent variable. This allowed us to account for potential early information arrival, for instance for expansions that were announced before the stock market closed on the day prior to the publication in *Het Financieele Dagblad*.

Step 2: Generating corrective terms. On theoretical grounds alone, we cannot exclude the possibility that the host country determinants and firm specific factors simultaneously impact how many resources a firm commits to a new foreign venture as well as the value that this venture adds to the firm. To the contrary, managers in value-focused firms are likely to choose the amount of resources to be committed to a new market, based on the attributes of their firms (such as information and resource endowments) and on exogenous conditions.

[9] For expansions from 1982, we used an AEX-equivalent index calculated by Datastream (our source of share prices and index data), since the AEX index was initiated only in 1983. Stock returns were adjusted for capital changes (e.g., stock splits, buybacks, regular capital issues, takeovers) and for dividend payments, and calculated in logarithmic terms to make the departure of daily data from normality less severe (Fama, 1976). Similarly, the benchmark index returns were in logarithmic form.

This implies that the internationalization decisions taken by managers are endogenous to the expected outcomes. In other words, the choice of the extent of commitment to a market, for instance whether to own a part of or the entire foreign venture, is endogenously determined, and this endogeneity should be accounted for empirically to avoid biased estimates (Hamilton & Nickerson, 2003; Shaver, 1998).

Another potentially problematic sample selection issue in our study may have to do with the fact that the number of the sample foreign ventures announced in financial press turned out to be substantially smaller than the total number of new subsidiaries listed in annual statements over the sample period; only 592 out of 1130 foreign ventures were announced in press. Moreover, due to methodological requirements, 104 observations were further excluded in the first step of the empirical analyses, as explained earlier.[10] If there was a systematic reason why some of the foreign ventures were announced simultaneously (instead of one by one) in financial press or not announced at all in the course of the fiscal year (and only appeared- listed in the annual statements), the regression estimates might be biased.

Therefore, two correction terms were generated. First, we estimated a classic probit model for the choice of partly versus wholly owned ventures. The probit model allowed us to quantify the likelihood that a new foreign venture is partly or wholly owned, conditional on the depth and the breadth of international experience of the focal parent firm, political hazards, economic risk, cultural differences, FDI restrictions (as reported by the International Monetary Fund), firm size and leverage, entry mode experience (measured as the count of all international partly and wholly owned ventures established by the sample firms prior to the focal entries), and firm-specific effects. Based on this model, we generated a sample selection correction term (λ) according to the procedure suggested by Shaver (1998, p. 581):

[10] Further 63 observations dropped out of the analyses due to missing data on independent variables, resulting in a total usable sample of 425 foreign ventures.

$\lambda = \varphi (\beta'X) / \Phi (\beta'X)$ if the new expansion was wholly owned, and

$\lambda = - \varphi (\beta'X) / [1-\Phi (\beta'X)]$ if the new expansion was partly owned, where

φ was the density function, Φ was the probability distribution function, and β was the vector of parameters as listed above[11] and including a constant term. This correction term was used as an additional explanatory variable in the third step of our analyses.

Next, in order to assure the analyses are not biased as a result of selection on the dependent variable (cf. Greene, 2003; Heckman, 1979), we generated a second correction term, and also used it as an additional regressor in our models. This correction term was defined as Heckman's lambda (Heckman, 1979), and based on a probit model for the probability of a foreign venture being individually announced in *Het Financieele Dagblad* (as opposed to not being announced there at all or being announced together with another venture or ventures). The explanatory variables were: the number of other expansions a parent firm had in the same year, the number of all prior foreign expansions, and two dummy variables capturing whether an expansion was partly or wholly owned, and whether it was a greenfield investment or an acquisition.

Step 3: Models of firm value created through international expansion. In the third step of our analyses, we employed the cumulative abnormal returns as the dependent variable within a sample selection corrected, second-order regression framework (Aiken & West, 1991; Greene, 2003; Hamilton & Nickerson, 2003; Heckman, 1979). We used the White covariance matrix estimator to control for potential heteroskedasticity problems, and excluded

[11] For more details on the exact operationalizations of the variables, see section 3.5.3.

observations contaminated with announcements of other ventures of the same company (either on the previous, the same, or the following day), as mentioned earlier.

Our hypotheses on the value created with new foreign ventures were tested using simple and interactive terms in second-order regression models. Following suggestions of Aiken and West (1991), we mean-centered all continuous independent variables to avoid collinearity problems when using the interactive terms, and to facilitate interpretation of the estimated parameters. Still, substantial collinearity was present across the different interactive terms, and a reliable estimation of a complete model (testing all the hypotheses simultaneously) proved impossible. Hence, we tested the (sub-) hypotheses one by one (as reported in section 3.6) and in subsets (the results are available upon request).

3.5.3. Independent variables

Depth of host country experience refers to the intensity of a firm's presence in a given host country (cf. Luo & Peng, 1999). We measured it as the number of subsidiaries the firm established locally since 1966 and prior to the focal entry.

Breadth of international experience was measured as the number of countries the focal firm has ever operated in since 1966. This measure of the breadth of international experience differs from the geographic scope measures used in earlier studies (e.g., Hitt et al., 1997; Barkema & Vermeulen, 1998) in that it accounts for parent firm experiences not only from countries where it currently operates, but also for experiences from abandoned geographic markets.

Political hazards. We measured the probability of change in government policy of a host country using Henisz' (2002) political hazards index (adjusted in such a way that high values implied high likelihood of change, and multiplied by 100). Consistent with our theory, Henisz' time-varying index captures a rich set of characteristics of the institutional and political

environments of a particular country in a particular year. The index takes account of checks and balances imposed on local leaders and parties, in the form of independent judges and courts, veto power of legislative chambers, etc., to measure a nation's ability to credibly commit to policies (see Henisz, 2002, for a more exhaustive description and calculation details). Hence, the measure captures host country political risk that is particularly relevant for foreign investors.

Economic risk of a host country was measured using the *Euromoney* magazine index, recoded in such a way that high values implied high risk. This index is based on factors such as economic performance of a country, access to bank lending, access to capital markets, debt indicators, discount on forfeiting, country credit rating, etc.

Cultural differences between a host country and the home country (the Netherlands) of internationalizing firms were measured using the Kogut and Singh's index (Kogut & Singh, 1988) based on the four dimensions of culture by Hofstede (1980, 2001), i.e. power distance, uncertainty avoidance, individualism / collectivism, and masculinity / femininity. Additionally, sensitivity analyses using the Euclidean and the five-dimensional measures of cultural distance (including long-term orientation dimension; Hofstede, 2001) were conducted.

Experience in non-focal politically hazardous / stable, economically risky / stable, and culturally remote / proximate countries. In order to operationalize these different aspects of non-focal host country experience, we first created a panel of more than 200 potential host countries, covering the period of 1966-1998. Next, we computed the mean values of political hazards, economic risk, and cultural differences in each year, and compared the individual host country scores on each of these variables to these respective mean values. Countries that scored above their mean values on political hazards, economic risk, and cultural differences variables were coded as politically hazardous, economically risky, and

culturally remote, respectively. Countries that scored below the mean values were coded as politically stable, economically safe, and culturally proximate, respectively.[12]

Next, we counted the number of foreign expansions that each of the parent firms undertook prior to the focal entry in the six different categories of countries, resulting in six pairwise-complementary measures of firm experience in non-focal host countries. Finally, we counted the numbers of countries in each of the six categories that each of the parent firms has ever expanded into prior to the focal entry, and used them as alternative measures of non-focal host country experiences.

These two sets of measures (counting the number of prior ventures versus counting the number of countries previously expanded into in each of the six categories of countries) represent two extreme ends of a spectrum on which a practically relevant measure of experience should be. The assumption behind the first set of measures is that each expansion brings the same amount of experience to an internationalizing firm, and that the value of this experience remains constant over time. The assumption behind the second set of measures is that the first expansion into a country brings all possible experience from this country. The values that would realistically quantify firm experience are somewhere in between these extremes. Hence, we tested whether our hypotheses would hold for the two 'extremes;' if they did, they should also hold for any value in between them.

Control variables. Since large firms may be more likely to fully own their new international ventures than small ones, and since the incremental value effects may be relatively small in large firms, we controlled for firm size, using the natural logarithm of the book value of the parent firm's assets, expressed in thousands of Dutch guilders and adjusted for

[12] The *Euromoney* magazine index of economic risk is available only as of 1982. Prior to this year, lacking other established measures, we used Goodnow & Hansz' (1972) country risk clusters (cf. Gatignon & Anderson, 1988), and classified their medium and high-risk countries as economically risky, while their low-risk countries were classified as economically stable.

Cultural distance index is constant over time, hence the coding of countries as culturally remote or proximate remains unchanged over time as well.

consumer price index changes. We also controlled for the firm's financial leverage (measured as the ratio of total liabilities to assets), since it may affect the firm's performance and ability to invest in new ventures (Jensen, 1986).

Next, we took account of the fact that the effect of the announcement of the new foreign venture may be confounded by other news released by the parent company, which may also influence the stock price. Although such potentially confounding events should be controlled for to avoid potential biases resulting from the so-called (other) event-induced variance and event clustering (Brown & Warner, 1980), few studies in strategic management have actually done so. Hence, we proposed a crude yet tractable method to control for such possible effects. We distinguished between four qualitatively different types of potentially value-relevant announcements (and screened *Het Financieele Dagblad* issues from three weeks prior to and after the announcement date of the focal international expansion to determine whether these types of announcements had been made or not): profitability-related announcements (for example, profit warnings); announcements of other expansions; changes in the ownership of non-focal ventures; and more general strategy-related announcements. We then created dummy variables capturing whether a given type of announcement was made by the focal firm around the time when news about establishing a foreign venture appeared in financial press. The binary variable capturing confounding announcements of other expansions appeared statistically significant, and was the only one kept in our models as additional control variable. Finally, using firm dummy variables, we controlled for firm-specific effects.[13]

The means, standard deviations, and correlation coefficients of the variables are presented in Table 3.1.

[13] In order to keep our models parsimonious, we included only those two firm dummy variables that appeared statistically significant.

Table 3.1. Means, standard deviations, and correlations [a]

		Mean[a]	S.d.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
1	Abnormal returns	.00	.02																					
2	Depth of host country experience	5.81	8.26	.12																				
3	Breadth of international experience	15.27	7.26	-.12	.07																			
	Numbers of prior expansions in categories of non-focal countries:																							
4	- politically hazardous countries	18.05	29.14	-.08	.35	.30																		
5	- politically stable countries	25.34	20.79	-.13	-.16	.43	-.30																	
6	- economically risky countries	8.49	7.80	-.08	.01	.90	.29	.26																
7	- economically stable countries	60.13	45.54	-.13	.34	.19	.75	.22	.06															
8	- culturally remote countries	6.63	6.29	-.05	.09	.87	.36	.34	.91	.21														
9	- culturally proximate countries	36.75	27.70	-.18	.24	.45	.78	.34	.30	.93	.42													
	Numbers of non-focal countries ever present in, in categories:																							
10	- politically hazardous countries	3.58	2.91	-.05	-.03	.89	.21	.26	.92	-.02	.84	.23												
11	- politically stable countries	12.05	4.92	-.16	.15	.94	.35	.50	.77	.34	.78	.58	.70											
12	- economically risky countries	6.16	5.21	-.11	-.05	.91	.20	.26	.95	-.05	.84	.22	.92	.79										
13	- economically stable countries	9.47	3.36	-.11	.28	.70	.38	.55	.43	.55	.54	.70	.44	.83	.38									
14	- culturally remote countries	3.96	3.48	-.06	.02	.92	.24	.33	.90	.06	.93	.30	.92	.80	.92	.52								
15	- culturally proximate countries	11.67	4.36	-.17	.14	.92	.34	.47	.76	.32	.70	.56	.72	.96	.78	.81	.72							
16	Political hazards	59.33	14.68	-.02	-.02	.21	.03	.13	.20	.02	.20	.08	.21	.18	.22	.11	.24	.16						
17	Economic risk	12.21	14.67	-.05	-.36	.27	-.09	.18	.33	-.14	.28	-.03	.32	.18	.35	-.01	.30	.18	.24					
18	Cultural distance	2.42	1.01	-.10	-.16	.30	-.02	.25	.31	.01	.27	.10	.31	.26	.30	.17	.33	.24	.41	.38				
19	Firm size	13.54	.89	-.08	.20	.44	.33	.22	.30	.39	.33	.45	.32	.44	.29	.48	.37	.42	.19	.12	.10			
20	Leverage	1.99	1.74	-.03	.05	-.02	.04	.05	-.02	.09	.00	.08	-.05	.01	-.02	.00	-.06	.04	-.05	.11	-.02	.16		
21	Correction for selection on CAR	.83	.31	.07	-.29	-.17	-.52	-.08	-.12	-.62	-.19	-.58	-.04	-.27	-.05	-.35	-.09	-.26	.01	.11	.02	-.32	-.12	
22	Correction for entry mode choice	-.57	1.07	-.01	-.45	.20	-.27	.23	.23	-.26	.18	-.16	.27	.10	.27	-.05	.27	.07	.26	.49	.43	.15	.04	-.09

[a] The mean values are for raw (non-centered) variables. Centering has no impact on standard errors and correlation coefficients.

3.6. Results

3.6.1. Hypotheses testing

The results of the regression models are presented in Tables 3.2 through 3.5. Hypothesis 1, which implied that the depth of host country experience positively relates to the value created with new expansions in that country, was corroborated (Models 1 and 2, Table 3.2). Similarly, we found support for Hypothesis 2 (see Model 2 in Table 3.2), implying that the positive impact of the depth of host country experience on the value created with new foreign ventures is further reinforced by the breadth of the parent firm's international experience.

Table 3.2. Results of regression analyses of cumulative abnormal returns: The role of depth and breadth of international experience [a]

	Model 1		Model 2	
Depth of host country experience	5.94*	(2.72)	4.48*	(2.64)
Breadth of international experience			-3.25†	(1.91)
Depth x Breadth			.53*	(.31)
Political hazards	.10	(.87)	.23	(.86)
Economic risk	-.03	(.72)	.62	(.79)
Cultural distance	-27.13*	(11.38)	-18.26	(11.19)
Firm size	-30.30*	(12.65)	-23.11†	(12.96)
Leverage	-.64	(4.38)	-.82	(4.17)
Correction for selection on the dependent variable	68.67	(42.49)	47.38	(42.18)
Correction for entry mode choice (partly versus wholly owned venture)	28.45†	(17.14)	21.21	(16.57)
Intercept	15.66	(38.65)	38.03	(38.95)
F-statistic	2.57**		2.53**	
R-squared	.08		.10	

[a] N = 425. Robust standard errors are in parentheses. Parameter estimates and standard errors are multiplied by 10^4. Significance levels are one-tailed for predicted effects and two-tailed otherwise. Statistically significant firm and confounding effect dummy variables are included but suppressed for reasons of space.

† $p < .10$
* $p < .05$
** $p < .01$

Our predictions regarding the role of past experience in the six types of host countries received partial support. No statistically significant coefficients were found with respect to the

Table 3.3. Results of regression analyses of cumulative abnormal returns: The role of experience in politically hazardous and stable countries [a]

	Model 3a		Model 3b	
Numbers of prior expansions in categories of non-focal countries:				
- politically hazardous countries x Political hazards	-.01	(.02)		
- politically stable countries x Political hazards	-.01	(.03)		
- politically hazardous countries	-.26	(.55)		
- politically stable countries	-1.73**	(.70)		
Numbers of non-focal countries ever present in, in categories:				
- politically hazardous countries x Political hazards			-.18	(.35)
- politically stable countries x Political hazards			.15	(.28)
- politically hazardous countries			10.78†	(6.06)
- politically stable countries			-11.70**	(3.97)
Political hazards	.44	(.94)	.27	(.82)
Economic risk	-.42	(.77)	-.52	(.80)
Cultural distance	-15.37	(12.15)	-16.37	(11.52)
Firm size	-13.88	(13.49)	-8.14	(13.12)
Leverage	.79	(3.87)	.54	(4.16)
Correction for selection on the dependent variable	-3.86	(49.88)	-26.62	(45.11)
Correction for entry mode choice (partly versus wholly owned venture)	4.64	(15.64)	-3.02	(14.37)
Intercept	74.73†	(43.72)	90.83*	(40.57)
F-statistic	2.11**		2.50**	
R-squared	.07		.07	

[a] N = 425. Robust standard errors are in parentheses. Parameter estimates and standard errors are multiplied by 10^4. Significance levels are one-tailed for predicted effects and two-tailed otherwise. Statistically significant firm and confounding effect dummy variables are included but suppressed for reasons of space.

† $p < .10$
* $p < .05$
** $p < .01$

role of past experience in politically hazardous and stable countries for firm value created with ventures newly established in such countries (Hypotheses 3a and 3b, Models 3a and 3b in Table 3.3).

The results presented in Models 4a and 4b (Table 3.4) suggested that past experience in economically unstable countries is particularly helpful when expanding into similarly risky locations. Experience from economically stable countries appeared to tax the value of new

Table 3.4. Results of regression analyses of cumulative abnormal returns: The role of experience in economically risky and stable countries [a]

	Model 4a		Model 4b	
Numbers of prior expansions in categories of non-focal countries:				
- economically risky countries x Economic risk	.09*	(.06)		
- economically stable countries x Economic risk	-.02†	(.01)		
- economically risky countries	-3.03†	(1.76)		
- economically stable countries	-.21	(.36)		
Numbers of non-focal countries ever present in, in categories:				
- economically risky countries x Economic risk			.21*	(.10)
- economically stable countries x Economic risk			-0.33†	(.25)
- economically risky countries			-5.65*	(2.71)
- economically stable countries			-2.89	(4.15)
Political hazards	.43	(.87)	.55	(.87)
Economic risk	-.90	(.82)	-.77	(.85)
Cultural distance	-19.70†	(11.75)	-17.54	(11.31)
Firm size	-12.18	(13.95)	-11.33	(12.98)
Leverage	-1.17	(4.07)	-1.53	(4.15)
Correction for selection on the dependent variable	-3.30	(54.11)	2.58	(42.19)
Correction for entry mode choice (partly versus wholly owned venture)	2.24	(15.16)	3.89	(14.73)
Intercept	60.93	(47.33)	61.68	(38.81)
F-statistic	2.21**		2.16**	
R-squared	.06		.07	

[a] N = 425. Robust standard errors are in parentheses. Parameter estimates and standard errors are multiplied by 10^4. Significance levels are one-tailed for predicted effects and two-tailed otherwise. Statistically significant firm and confounding effect dummy variables are included but suppressed for reasons of space.

† $p < .10$
* $p < .05$
** $p < .01$

expansions, the more so the higher the economic risk, although the relevant statistical coefficients were only marginally significant. These results are in line with our expectation that in unstable environments, prior experiences may become a liability. An alternative, and consistent with our theory, interpretation of these results is that experience from stable countries has a more positive impact on firm value the more *stable* the economy of the host country is. This reinforces our point that the value of experience is contingent on its adequacy relative to the environment. Finally, Hypotheses 4a and 4b received support in models where

experience in non-focal countries was measured both as the number of prior expansions and the number of distinct countries expanded into prior to the focal entry. The hypotheses thus appeared to hold for both the extreme operationalizations of firm experience in non-focal countries, suggesting that the hypothesized effects should hold for values subject to weaker (more realistic) assumptions regarding learning from past experience as well.

We also found that past experience from culturally remote locations is particularly valuable with increasing cultural distance between the home and the host countries (Models 5a and 5b, Table 3.5). On the other hand, experience from culturally proximate countries has a negative impact on the value of new expansions in culturally distant locations. These results, supporting Hypotheses 5a and 5b, are also in line with the expectation that irrelevant experience may become a liability for internationalizing firms.

Our insignificant findings with respect to the role of past experience in politically hazardous and stable countries for the value creation capabilities of new expansions in such countries (Hypotheses 3a and 3b) require further discussion. One reason for the lack of support for our predictions may be that Henisz' (2002) measure of the likelihood of policy changes may confound changes which have positive and negative effects on firm value potentially created with a new foreign venture. While policy changes may be positive, an overthrow of the local government or ruling party might also imply that the operating conditions deteriorate as a result of policy adjustments. If such an unfavorable set of events indeed occurred, it might have forced the firm to withdraw from this market and ultimately prevent it from using its prior experiences in this country even if they did apply. This may further prevent the firm from identifying new valuable expansion opportunities locally. Hence, past experience from politically hazardous countries may be impossible to apply in particularly hazardous countries after a change occurs. Moreover, some past experiences from politically stable countries may in fact be applicable in politically hazardous countries as

Table 3.5. Results of regression analyses of cumulative abnormal returns: The role of experience in culturally remote and proximate countries [a]

	Model 5a		Model 5b	
Numbers of prior expansions in categories of non-focal countries:				
- culturally remote countries * Cultural distance	2.27*	(1.06)		
- culturally proximate countries * Cultural distance	-.51†	(.34)		
- culturally remote countries	-.75	(2.25)		
- culturally proximate countries	-1.02	(.62)		
Numbers of non-focal countries ever present in, in categories:				
- culturally remote countries * Cultural distance			5.91*	(2.84)
- culturally proximate countries * Cultural distance			-5.68*	(3.02)
- culturally remote countries			4.66	(4.57)
- culturally proximate countries			-10.86**	(3.83)
Political hazards	.34	(.89)	.45	(.85)
Economic risk	-.83	(.78)	-.50	(.79)
Cultural distance	-17.06	(13.16)	-16.53	(12.56)
Firm size	-7.13	(13.69)	-10.01	(12.19)
Leverage	-.28	(4.08)	1.05	(4.09)
Correction for selection on the dependent variable	-24.31	(50.58)	-12.50	(41.49)
Correction for entry mode choice (partly versus wholly owned venture)	-2.04	(15.15)	-1.82	(14.47)
Intercept	74.42†	(43.75)	79.16*	(38.52)
F-statistic	2.52**		2.77***	
R-squared	.07		.08	

[a] N = 425. Robust standard errors are in parentheses. Parameter estimates and standard errors are multiplied by 10^4. Significance levels are one-tailed for predicted effects and two-tailed otherwise. Statistically significant firm and confounding effect dummy variables are included but suppressed for reasons of space.

† $p < .10$
* $p < .05$
** $p < .01$
*** $p < .001$

defined using Henisz' (2002) index. This may happen if policy changes are driving the focal (unstable) host country to become similar to other politically stable locations where the parent firm expanded in the past. This two-way effect of policy changes may explain our insignificant results.

Another puzzling empirical finding is that experience in politically stable countries has a negative impact on abnormal returns upon new foreign venture formation, irrespectively

of the character of a host country (Models 3a and 3b). A similar pattern can be seen in Models 4a and 4b, where the main terms of experience in economically risky countries appeared negative as well (still, here the interactive terms of experience measures with economic risk are statistically significant, thereby supporting Hypotheses 4a and 4b). Moreover, experiences across a range of politically hazardous countries appeared to have a marginally positive impact on firm value (Model 3b). These results may be due to the single home country research design of our study. The home country – the Netherlands – was itself economically and politically stable over the sample period. The sample Dutch multinationals invested mainly in other stable countries (compare the mean values of the different experience variables in Table 3.1). This might have left them insufficiently prepared for investments in less stable regions. This would explain why expansions into such markets might be disappointing for the stock market, as the data seem to indicate. Nevertheless, these intriguing results point to the need for further conceptual and empirical investigations into this issue.

3.6.2. Additional analyses

In order to assure robustness of the empirical results, we re-estimated our models using several additional control variables. First and foremost, three alternative measures of cultural distance were computed and used instead of the four-dimensional Kogut and Singh's (1988) index: (1) a five-dimensional Kogut and Singh's measure (with the long-term orientation dimension of culture accounted for); (2) a four-dimensional Euclidean index; (3) a five-dimensional Euclidean index. Next, in order to account for the possibility that market size and potential determine firm value creation upon a new international entry, we controlled for host country GNP and the growth of GNP per capita. We also checked for the potential effect of business relatedness of new expansions, using a dummy variable equal to one if a subsidiary's business was not related to the core business(-es) of the parent firm, and zero otherwise. All these additional analyses rendered results similar to the ones reported in Tables 3.2-3.5, yet

were based on smaller samples due to missing data (and therefore sometimes weaker than the ones reported here). Most of the hypothesized patterns received support in these analyses.

We also investigated potential time effects (using year dummies and an orthogonal fourth degree polynomial of a trend variable) and potential cultural region-specific effects (using nine cultural block dummy variables, based on classification proposed by Ronen & Shenkar, 1985, and supplemented with a class of post-communist countries not accounted for in their original study). Inclusion of none of the variables appeared to alter the earlier-reported results. Next, we recalculated the dependent variable using the Central Dutch Statistical Office (CBS) stock market index as a benchmark for estimating normal and abnormal returns, instead of the AEX index. The results were somewhat weaker than the ones presented eaerlier, yet most of the expected relationships were replicated. Finally, we re-estimated our models excluding the two sample selection correction terms. While the two correction terms were not statistically significant in any of the models (with the exception of the marginally significant entry mode choice correction term in Model 1), the other model parameters as well as model fit statistics were somewhat different. This is consistent with the idea that models estimated without accounting for potential endogenous sample selection may lead to biased – and hence, different – results.

3.7. Discussion and conclusions

Firms expanding abroad are confronted with a variety of operating environments and the associated complexity of managing their international activities. The changing and uncertain environments may invalidate the international experience firms rely on while internationalizing. This underscores the idea that international expansion is a hazardous process. Building on the behavioral theory of organizational learning, we took a closer look at

the role of international experience in the process of expansion into countries of diverse political, economic, and cultural backgrounds. We identified two dimensions of international experience: its depth and breadth. Most prior studies in the international business field focused on the first of the two and predicted its positive impact on firm performance and subsidiary survival. In contrast to this stream of research, we suggested that past experience, while generally helpful, might be a mixed blessing if it is not applicable in a new investment situation.

The inapplicability of experience may result from its obsolescence due to shifts in the environment. Even if no major changes in the local environment took place, the new investment situation may substantially differ from those experienced previously, for instance with respect to political, economic, and cultural characteristics of the host country. In such cases past experience may turn irrelevant. Negative performance outcomes are likely if such irrelevant experiences are applied in new foreign ventures. This would imply that successful firms should not only be able to develop a base of international experiences, but also have the capability to distinguish relevant experiences from irrelevant ones. We claimed that broad experiences are likely to equip firms with this capability. Hence, we expected that international experience breadth makes firms less likely to misapply prior experiences, and therefore reinforces the positive effect of past (deep) experience on value creation potential of new foreign ventures.

Furthermore, we proposed that experiences from countries similar to the focal host country are particularly helpful, the more so the more demanding the local environment is. Building on prior literature, we broadly categorized countries as politically hazardous versus stable, economically risky versus stable, and culturally remote versus proximate. We predicted that the more challenging the local environment is – with respect to political or macroeconomic conditions, or cultural distance – the more valuable past experiences from

similarly challenging locations are. Such experiences endow firms with the right set of routines that can be readily used when expanding into a particularly demanding market. They are the more valuable the more challenging the new expansion appears to be. They also help firms to correctly apply or disregard past experiences in new investment situations. Conversely, past experiences from less demanding locations (i.e., stable in terms of policies and macroeconomic conditions, or culturally similar to the home market) are applicable in a limited set of countries. In the case of multinationals originating from the Netherlands or any other relatively stable (developed) country, as well as in the case of firms that never expanded into culturally remote locations, lack of experience from comparably challenging countries may prove particularly damaging when expanding there, as our theory and results imply.

These conjectures were tested using a three-step methodology. In the first step, we employed the event study method to generate the dependent variable, i.e. shareholder wealth created with new foreign ventures. In the second step, we computed two correction terms for potentially endogenous entry mode choice and sample selection on the dependent variable. Finally, eight second-order regression models explaining firm value creation were estimated. The results corroborated most of our predictions, while revealing areas in need of further investigations.

The empirical results diverge from those reported in Delios and Henisz (2003), who hypothesized and found that prior experience in politically hazardous countries reduced the negative impact of political hazards on rates of FDI entry into a host country. They also found that low-hazards country experience had an increasingly negative effect on rates of FDI entry with higher political hazards. Assuming that firms tend to invest in countries where they are most likely to create value, our results should have paralleled those of Delios and Henisz (2003). Our insignificant findings could be explained with the nature of Henisz' (2002) measure of political hazards, which captures the likelihood of (positive or negative) changes

in government policies, as discussed in section 3.6.1. Yet, if this held for our findings, it would also be true of results in Delios and Henisz (2003). If the Japanese firms in their sample expanded primarily into countries with negative policy change risk, this would explain the more pronounced significance of statistical coefficients in their estimations. The lack of convergence of our findings with theirs suggests that future research may benefit from distinguishing conceptually and empirically between positive and negative hazards related to policy changes.

There is also a need to study the role of various aspects of international experience of firms originating from more than a single home country, specifically to compare firms originating from countries of diverse economic, political, and cultural backgrounds. Earlier literature explored whether national origin of firms may affect their ownership strategies when expanding abroad (e.g., Erramilli, 1996; Hennart & Larimo, 1998). Given that strategies translate into organizational performance, an interesting research question would be whether a firm's country of origin affects the relative performance outcomes of different expansion strategies – such as incremental patterns of increasing commitment to foreign markets and expanding into gradually more 'psychically' remote locations, deemed most successful in prior research on staged internationalization (Barkema at al., 1996; Johanson & Vahlne, 1977). For example, are firms originating from economically turbulent countries more likely to succeed when taking 'larger' internationalization steps than companies originating from stable economies? The theory proposed in our paper, while not dismissing the stages model of internationalization (Johanson & Vahlne, 1977, 1990), does suggest that an answer to the above question may be: yes. It also suggests that the success of stepwise internationalization strategies may be enhanced if firms pay attention to diversity of their international experience. It should protect them from false confidence, which may result from successful past expansions undertaken in an incremental manner, i.e., venturing into countries that did not

diverge much from what was recorded in the organizational experience base at the moment of entry.

Building on prior literature that stressed the importance of organizational experience for performance, our paper proposed that it is the diversity of experience that helps firms to correctly apply or disregard past experiences when taking new strategic decisions (cf. Haleblian & Finkelstein, 1999). This argument parallels those of prior studies that proposed that strategically novel actions of firms (i.e., exploratory moves) spark higher-level organizational learning, and are beneficial to performance, at least up to a point (Barkema & Vermeulen, 1998; Eriksson et al., 2000; Fiol & Lyles, 1985; March, 1991). Our argument implies additionally that *past* exposure to strategic novelty is beneficial for firms' ability to correctly use or disregard organizational routines.

What we do not know, however, is how and what firms actually learn from diverse experiences, i.e. what the mechanisms of accumulating and interpreting diverse experiences are and how characteristics of the current experience bases of firms impact organizational learning from (and making sense of) diversity. In fact, the marginally negative relationship between experience breadth and firm value creation found in Model 2 (Table 3.2) suggests that firms may be unable to learn from (too) diverse experiences, for instance that they make erroneous inferences from them, or that they lack the absorptive capacity (Cohen & Levinthal, 1990) to learn from them. Another explanation for this result can be that managers are not necessarily able to handle organizational complexity that results from diversity. Future research would benefit from clarifying these issues.

We also do not know whether performance effects of learning from diversity are linear and stable over time. As long as the structure and content of experience are adequate relative to environments in which a firm operates, no non-linear effects of any aspect of experience on performance should be expected. Yet, we lack understanding of when experience is

adequately balanced and how to achieve such an optimal state if it existed. Perhaps this is not the structure of experience at any point in time that matters most; instead, the critical factor may be the process through which experience base developed over time (cf. Vermeulen & Barkema, 2002). We also do not understand how inter- and intra-organizational relations (networks) impact the nature of organizational experience. Finally, we do not know how experience ages, and how this process changes the ways in which experience is used in organizations. Are recent experiences more likely to be relied on even if older ones would be more relevant? These and other issues related to organizational experience need to be further studied, above and beyond the context of international expansion.

Chapter 4

The value of expansions within and across industries

4.1. Abstract

In an attempt to reconcile prior inconsistent findings regarding the diversification-performance relationship, we build on organizational learning theory to propose a process perspective on corporate expansion within and across industries. Industry-specific experience of firms and experience across industries are shown to be the bases of distinct yet complementary skills that help firms create value. Entries into unrelated (rather than core or related) businesses, and acquisitions (rather than greenfield investments), are predicted to be particularly valuable with increasing experience across industries. The converse is expected to hold for within-industry experience. Empirical tests render results that support most of the theoretical predictions.

4.2. Introduction

Corporate diversification and its relationship with organizational performance has been the subject of one of the longest academic debates in the fields of management and finance. Yet, both theoretical and empirical consensus on this relationship is lacking (Palich et al., 2000). Many scholars investigated the relationship between performance and the *degree* to which a firm is diversified (hereafter *diversity*) from a variety of theoretical perspectives. Empirically, they provided evidence for a positive, neutral, negative, and inverted U shape of this relationship (see Datta, Rajagopalan, & Rasheed, 1991, and Palich et al., 2000, for reviews). Another stream of literature in this area focused on individual *diversification events*, typically mergers or acquisitions (Montgomery, 1994; Penrose, 1995), in domains related and unrelated to core activities of focal firms. However, here too the empirical evidence is not unanimous (see Datta, Pinches, & Narayanan, 1992, and King, Dalton, Daily, & Covin, 2004, for reviews of research into acquisitions).

Interestingly, although already Penrose (1995; first edition in 1959) described diversification of firms as one aspect of their growth *process*, only a small number of authors have since adopted a *dynamic* view on corporate diversification and diversity (Chang, 1996; Kim & Kogut, 1996; Markides & Williamson, 1996; Matsusaka, 2001; Teece, Rumelt, Dosi, & Winter, 1994). From the dynamic perspective, diversity is seen as an outcome of temporarily ordered, path-dependent decisions that managers take in their search for alternative courses of actions, as a response to specific problems or opportunities. In fact, it is not the diversity of firms *per se* that matters for their profitability and survival in the long run, but rather their abilities to establish wide 'bases' or 'platforms' from which they can adapt and extend their operations (cf. Kim & Kogut, 1996; Penrose, 1995). Such 'platforms' are developed over time and with experience, rather than assembled at a single point in time.

From this perspective, organizational experience and the resulting capabilities are seen as important determinants of how corporate portfolios may be successfully developed. Yet, it remains unclear what kinds of competencies firms need to expand within and across industries, and how these competencies can be developed.

Our study aims to address this question by focusing on corporate histories of expansions within and across industries and firm value created in the process. This allows us to investigate what steps firms take on their diversification routes and what consequences prior steps have for firms' capabilities to take subsequent steps successfully, i.e., to create value when doing so. We build on organizational learning theory to explain what firms may learn from taking such steps, and propose that firm value created as a result of corporate expansion within or across industries depends on the firm's experience within the focal industry and its capability to correctly apply or disregard prior experiences from this and other industries (cf. Haleblian & Finkelstein, 1999). This capability, we argue, is fueled by diversity of past experiences of firms. Based on our theory, we further propose that greenfield investments and entries into industries related to the core activities of firms are particularly likely to create value with increasing within-industry experience. On the other hand, we expect expansions into unrelated businesses and acquisitions to be most likely to create value if firms have the capability to disregard inapplicable past experiences.

The contributions of this paper are two-fold. First, unlike most prior studies, we take a dynamic perspective to firm value creation through expansions within and across industries, and show how organizational experience within one industry may assist in successful growth in this industry and in other domains. Second, we focus on individual expansion moves and consider *both* acquisitions and greenfield investments as possible steps on diversification routes. This is in sharp contrast to the majority of prior research into individual expansion moves, which by design singled out internal development as possible means of growth within

and across industries. By looking at both internal and acquisitive growth, we attempt to find out which organizational experiences (and the resulting capabilities) help firms create relatively more or less value when expanding in one way or the other.

The theoretical predictions were tested on a sample of 623 within- and across-industry expansions of 25 firms over a period of 26 years (1973-1998), using a 3-step methodology. In the first step, event study method was used to estimate how much shareholder wealth was created with a new corporate expansion. In the second step, we generated a corrective term for selection of observations based on availability and quality of data needed to compute the dependent variable. In the final step, second-order sample-selection corrected regression techniques were used to test the hypotheses. The empirical evidence corroborated some of our predictions, while revealing areas in need of further investigations.

4.3. Background

4.3.1. Diversity, diversification, and organizational performance

Corporate diversification decisions are among the most important and visible moves a firm can make. It is therefore not surprising that much research has been done into how business diversity of firms – and their diversification moves – relate to organizational performance. Scholars investigated issues such as motives, costs, and benefits of diversity and diversification (e.g., agency problems, organizational complexity, availability of resources or opportunities, synergy effects, economies of scale and scope, risk reduction, financial benefits, market power changes, etc.), as well as diversification strategies (cf. Rumelt, 1982; Datta et al., 1991; Palich et al. 2000). A variety of theoretical perspectives were drawn upon, including the resource-based view of the firm (Mahoney & Pandian, 1992; Markides &

Williamson, 1996), transaction costs economics (Teece, 1982), agency theory (Amihud & Lev, 1985; Jensen, 1986; Shleifer & Vishny, 1989), market power perspective (Caves, 1981), cognitive theory (Bettis & Prahalad, 1995; Ginsberg, 1990; Prahalad & Bettis, 1986), and real option perspective (Bernardo & Chowdhry, 2002). For the purpose of our study, we distinguished two main streams within this literature: one focusing on the relationship between diversity of firms and their performance, and the other focusing on individual diversification events, typically acquisitions, and their performance implications (see Datta et al., 1991, Datta et al., 1992; King et al., 2004; Martin & Sayrak, 2003; Montgomery, 1994, and Palich et al., 2000, for related literature reviews).

Within the former stream of literature, based on a range of theories scholars derived a variety of hypotheses regarding the diversity-performance association. Empirical evidence for a positive, negative, neutral, and curvilinear shape of this link is abundant (Berger & Ofek, 1995; Comment & Jarrell, 1995; Lang & Stulz, 1994; Montgomery & Wernerfelt, 1988; Palepu, 1985; Palich et al., 2000; Rajan, Servaes, & Zingales, 2000; Rumelt, 1982; Villalonga, 2004). One common characteristic of these studies is their 'snapshot' view on corporate diversity, with particular attention being paid to contingencies for performance of certain (types of) firms at certain points in time. It was shown, for example, that the diversity-performance relationship varies over time (Grant & Jammine, 1988; Lubatkin, Srinivasan, & Merchant, 1997; Martin & Sayrak, 2003; Mayer & Whittington, 2003; Montgomery, 1994), with firm- or industry-specific characteristics (Bettis & Mahajan, 1985; Campa & Kedia, 2002; Delios & Beamish, 1999; Grant & Jammine, 1988; Van Oijen & Douma, 2000), as well as contextual factors (Makino, Isobe, & Chan, 2004; Mayer & Whittington, 2003). Also, geographic scope of firms was shown to play an important role in their ability to benefit from business diversity (Geringer, Tallman, & Olsen, 2000; Hitt et al., 1997; Tallman & Li, 1992; Wan & Hoskisson, 2003). In short, it appears that performance implications of corporate

diversity depend on the conditions under which it is attempted. However, also the way in which diversity is achieved, or the individual steps that companies take on their diversification routes, may play an important role in explaining firm performance and value creation (cf. Penrose, 1995).

The second major stream of literature we distinguished in this paper provides some insights into this very issue. So far, its primary focus has been on mergers and acquisitions (Montgomery, 1994). In this body of research, the most commonly submitted and supported hypothesis is that – thanks to synergies, economies of scale and scope, potential for building on and sharing existing resource and knowledge, etc. – related acquisitions and non-conglomerate mergers are more successful than unrelated acquisitions and conglomerate mergers, respectively (Flanagan¸ 1996; Flangan & O'Shaughnessy, 2003; Haleblian & Finkelstein, 1999; Maquieira, Megginson & Nail, 1998; Morck, Shleifer, & Vishny, 1990; Pangarkar & Lie, 2004; Pennings et al., 1994). However, there are also studies whose authors postulated and / or provided empirical evidence for a negative or inverted U-shaped relationship between target firm's relatedness to the bidder firm and performance outcomes of acquisitions, in terms of firm value creation, innovativeness, and survival (Ahuja & Katila, 2001; King et al., 2004; Matsusaka, 1993; Vermeulen & Barkema, 2001).

Theory and evidence regarding internal diversification moves, in particular when compared to acquisitive growth, is scarce. This is especially striking when we consider that many firms expand internally into familiar as well as relatively novel areas, through exploitation and recombination of their existing capabilities (cf. Penrose, 1995). While diversifying expansions are more likely to be carried out through acquisition than through greenfield investment (Hennart & Park, 1993), exclusive reliance on a single mode of expansion within and / or across industries may restrict performance (Busija, O'Neill, & Zeithaml, 1997; Vermeulen & Barkema, 2001). Yet, we lack understanding of performance

consequences of internal growth within and across industries. In this respect, a few notable exceptions are studies by Chatterjee and Singh (1999), Lamont and Anderson (1985), Pennings et al. (1994), and Simmonds (1990). They provided arguments and some evidence regarding preference of firms for different modes of diversification (Chatterjee & Singh, 1999), and performance outcomes of (related) internal expansion over (unrelated and / or) acquisitive growth (Lamont & Anderson, 1985; Pennings et al., 1994; Simmonds, 1990). However, little agreement exists among these studies with respect to performance implications of expansions within and across industries by means of internal development and acquisition. Hence, there is a need for further research into firm value implications of both modes of diversification.

One common characteristic of studies in the stream of literature on individual diversification moves is their treatment of corporate expansions as isolated events. Yet, in reality, such events – and their impact on corporate performance – are not independent of other events in corporate history, in particular other expansions within and across industries (cf. Côté, Langley, & Pasquero, 1999; Kim & Kogut, 1996; Teece et al., 1994). In fact, organizations must be grown, and the way they grow matters for their performance (Brown & Eisenhardt, 1997, Penrose, 1995). Building a successful corporation requires that the decision-makers not only know what they should aim for (i.e., what extent of corporate diversity, if any, is performance-optimal), but – perhaps more importantly – how to reach this point (i.e., what steps on corporate diversification routes are particularly valuable). In essence, this is a question of how successful organizations build their business portfolios over time. In order to address this question, a dynamic perspective on expansions within and across industries is needed.

4.3.2. Dynamic perspectives on expansions within and across industries

From the early days of research into performance consequences of corporate expansion, researchers adopted a process perspective (cf. Penrose, 1995). However, it has not been until much more recently that a dynamic perspective on diversification-performance relationship was proposed. In their pioneering work, Prahalad and Bettis (1986) suggested a cognitive explanation for the link between diversification and performance. They noted that it is not necessarily the diversity of firms that matters for their performance *per se*, but that the quality of managerial skills, ability to acquire new skills, and the current 'dominant logic(s)' used by managers when expanding within and across industries are key. The dominant logics of managers and organizations are their conceptualizations of businesses and learned problem-solving and decision-making behaviors (Prahalad & Bettis, 1986). These conceptualizations and behaviors are determined by past experience and the resulting organizational routines (Nelson & Winter, 1982). Over time and with new experiences, managers and organizations learn, search for new solutions, and amend their dominant logics and routines through feedback (Bettis & Prahalad, 1995; Chang, 1996). This in turn affects their subsequent capabilities to expand into novel and familiar businesses, in close proximity of core activities of firms and further away, by means of greenfield investment and acquisition.

In a similar vein, Kim and Kogut (1996) observed that firms diversify and adapt by learning, within the constraints imposed by their past experiences and current capabilities. From this perspective, corporate expansion within and across industries can be viewed as an "evolution of a stock of experiential knowledge that provides a platform by which to enter related fields" (Kim & Kogut, 1996, p. 292; Penrose, 1995). As firms expand, they add activities that typically relate to some aspects of their current activities and experience repositories (Teece et al., 1994; Penrose, 1995; Van Kranenburg, Cloodt, & Hagedoorn, 2001). This path-dependence of corporate expansions within and across industries is due to

the cumulative nature of organizational learning, which imposes constraints on what firms can do and learn. Importantly, when resources and experience bases of firms differ, what firms learn from their new expansions may also differ, and the value of this information will not be the same for different firms either (Bernardo & Chowdhry, 2002; Foss & Christensen, 2001). This implies that certain steps on diversification routes that are successful in the case of one firm may prove futile or even destructive in the case of another one, even if perfectly replicated (Nachum, 2004). In fact, firms are likely to create value if they choose businesses that match their capabilities well (Matsusaka, 2001; Penrose, 1995). Yet, it is not impossible that firms improve their performance when expanding into unrelated fields, too (Markides & Williamson, 1996; Matsusaka, 1993). Indeed, diversified expansion is particularly likely to be undertaken and improve profitability of a firm when the firm's existing markets do not grow fast enough to fully utilize its productive capabilities, and superior opportunities arise outside of these markets (Penrose, 1995). So far, however, it remained unclear what capabilities firms need in order to be able to realize the benefits of their growth potential and create value when expanding within and across industries. In what follows we take the organizational learning perspective to develop a theory and hypotheses addressing this issue.

4.4. Theory and hypotheses

From the organizational learning perspective (cf. Cyert & March, 1963; Fiol & Lyles, 1985; Levitt & March, 1988), corporate expansion within and across industries can be seen as a learning process, where firms gradually improve their routines (cf. Nelson & Winter, 1982) and become more competent and confident in their capabilities to expand into familiar as well as novel, related or unrelated, businesses (cf. Markides & Williamson, 1996; Penrose, 1995).

This learning process is firm-specific and path-dependent. Past experiences of firms form the bases of their routines, dominant logics, and knowledge, which in turn frame managerial decisions and are inform subsequent learning and adaptation. In this sense, prior experiences restrict the area in which decision-makers search for new investment opportunities to that of 'past solutions' (Cyert & March, 1963), such as for example industries or 'specialization areas' (Penrose, 1995) already represented in firms' experience repositories. However, these current routines and dominant logics do not preclude managers from coincidental discoveries of investment opportunities in novel and / or unrelated business areas, which hold a promise of superior profitability and value creation. In what follows, therefore, we propose a distinction between expansions into areas 'related' to core activities of firms and those 'unrelated,' where 'unrelated' entries are defined as leading to "increases in the number of 'basic areas' of production in which a firm operates," consistent with Penrose (1995, p. 109). We discuss the nature of these two different types of expansion and conditions for their successful implementation, depending on past experiences of firms.

Expansions into businesses related to core activities of a firm represent relatively small, 'coherent' (cf. Teece et al., 1994) steps on firms' diversification routes. Such steps are taken with reference to a current dominant logic a decision-maker relies on, a logic which is largely shaped by the core activities of the firm (Prahalad & Bettis, 1986). With each 'small step,' the firm essentially replicates some aspects of its prior expansions; therefore, when doing so, the firm can rely on and possibly improve its current routines. This makes the firm more likely to succeed with the new expansion move. Moreover, the better the managers know a given business domain, the more likely they are to identify superior investment opportunities in this domain, for example particularly attractive acquisition targets. Thus, in a path-dependent way, prior expansions within a given business domain provide the kind of experiences and understanding of the focal industry that allow the managers to select and

successfully exercise superior investment opportunities. At the same time, however, such experiences may impose constraints on organizational search for new opportunities outside of the core domains.

Continued expansions involving exploitation of an existing, industry-specific set of routines, while possibly leading to refinements of these routines, may also constrain the firm's capabilities to develop new skills and successfully amend their business portfolios (cf. Fiol & Lyles, 1985; Kogut & Zander, 1992; March, 1991). Therefore, long-term survival of firms requires that they not only refine their routines, but also recombine elements of their knowledge and explore new knowledge (cf. Kogut & Zander, 1992; March, 1991). By injecting new knowledge or renewing it through recombination, firms can offset potential inertia and lockup problems. In practical terms, as most organizational learning occurs by doing, firms need to take both small, coherent steps on existing diversification routes or in close proximity of those routes, as well as expansion steps of a more exploratory character (cf. March, 1991; Vermeulen & Barkema, 2001). Such exploratory investments may broaden and refresh the current experience bases of firms. Some of these steps may lead to initiation of new lines of business, which may eventually become core domains and take over the roles of other, possibly less profitable businesses, in corporate portfolios.

The outcomes of these exploratory, 'large steps,' i.e. expansions into businesses unrelated to core activities of firms that break rather than exploit the current organizational routines, are systematically more uncertain than the outcomes of the incremental, internally consistent 'small steps.' Returns from the 'large steps' are also more distant in time and organizationally more remote from the locus of action than the 'small steps' (cf. March, 1991). Therefore, firms are more likely to make mistakes when embarking on such routine-breaking expansions. Initially, they may not only have little experience to rely on, but also face the need to unlearn or abandon some of their past routines before developing new

ones (Bettis & Prahald, 1995). Yet, some experiences from areas other than the one where a firm chooses to expand may assist in undertaking such an exploratory expansion, as well as in learning from it (Cohen & Levinthal, 1990). Indeed, when taking such a 'large step,' a firm may be able to make some use of its existing routines and knowledge, for instance through 'transplantation' of experiences from those areas remote from its core activities that in some way resemble the current investment situation, but also through recombination of elements of organizational wisdom from a set of past experiences (cf. Kogut & Zander, 1992; Penrose, 1995). Thus, from the viewpoint of firms expanding within and across industries, it is critical to identify what sorts of organizational capabilities and experiences indeed help them to create value when expanding within and across industries.

4.4.1. Organizational experience

Managerial and organizational experiences are the primary inputs into the process of developing corporate routines and management logics on which firms rely when expanding within and across industries. Experience in establishing and running businesses in a given industry helps managers to understand the peculiarities of this industry, for example characteristics of customer or supplier bases, prevailing trade practices, technical and regulatory aspects, competitive pressures, etc. Prior ventures established in this (and related) domains can also help the firm to build a network of connections, alliances, and so on, all of which may lead to efficiency gains. A well-established industry actor is also in a superior position to identify and quickly exercise new investment opportunities. Finally, past industry experience implies that the new expansion relates to some aspect of prior activities of the firm, thereby resulting in a more 'coherent' and cognitively 'related' diversification move (cf. Teece et. al., 1994). This leads to the following hypothesis:

Hypothesis 1: The larger a firm's experience in a given industry, the higher the firm value created with a new expansion.

Within-industry experiences are typically fairly homogenous; the kinds of customers and suppliers a firm learns to deal with, the regulatory or competitive pressures, etc., are all the same within a given industry. Even though substantial changes may take place as industries evolve over longer periods of time, within-industry experiences are unlikely to provide the firm with the range of diverse routines and multiple logics it may need to be able to survive in the long run (Markides & Williamson, 1996; Prahalad & Bettis, 1986). Continued positive performance feedback on past actions within a familiar homogenous setting may leave the firm not only inert (cf. Hannan & Freeman, 1977), but also unable to identify threats and opportunities that arise outside of this setting (Miller & Chen, 1996). Narrow experience may also leave the firm's competitive advantage eroded as a result of competitive pressures, such as for example imitation by other firms (Markides & Williamson, 1996). Even if managers of such a narrowly experienced firm coincidentally spot a novel investment opportunity in an unfamiliar setting, they may misapply their prior industry experiences to this novel opportunity. This may lead to negative performance outcomes (Haleblian & Finkelstein, 1999; Levinthal & March, 1993). In the long run, when the narrowly experienced firm exhausts its opportunities within the given industry and is not able to renew itself, its performance is likely to decline.

All these problems are likely to be avoided if firms possess heterogeneous, cross-industry experiences. Such experiences may help firms to build multiple sets of routines which they can rely on when scanning industries remote from their core activities for new opportunities and threats. This will make them not only more likely to spot particularly valuable opportunities outside of their core businesses, but also more likely to succeed when attempting to exercise them. Furthermore, cross-industry experiences may also be beneficial

as they provide a basis for absorption and deployment of new knowledge, by increasing the likelihood that incoming information would relate to what the firm already knows (Cohen & Levinthal, 1990). Broad experiences also increase the likelihood that new useful combinations of knowledge will be made (cf. Kogut & Zander, 1992; Markides & Williamson, 1996). Past experiences particularly closely resembling the current investment situation may also be transferred and routines 'transplanted' to this situation (Penrose, 1995).

Finally, cross-industry experiences of firms, rather than simply the diversity of their current activities, are likely to endow firms with the kind of knowledge they need to be able to correctly apply or disregard their past experiences (cf. Haleblian & Finkelstein, 1999; Teece, 1982). The correct use of prior knowledge requires that managers distinguish between investment situations which are similar to earlier experienced ones along certain dimensions, and situations that are novel along at least one of these dimensions. Diversity of experiences is likely to make firms better aware of potential differences among industries, for instance with respect to characteristics of customer or supplier bases, trade practices, competitive and regulatory pressures, etc. This awareness can help managers avoid undue confidence, as well as misinterpretation and misapplication of their past experiences to those new investment situations to which these experiences do not apply. Thus, we argue that cross-industry experiences encourage appropriate use of organizational routines (cf. Levinthal & March, 1993).

The above discussion suggests that cross-industry experience can help firms generate value when diversifying. It also suggests that such experience is a desired complement to and a hedge against potential negative consequences of narrow within-industry experience of firms. Hence, we expect the following:

Hypothesis 2: The larger a firm's experience across industries, the higher the firm value created with a new expansion.

Hypothesis 3: The larger a firm's experience across industries, the more positive is the impact of the firm's experience in a given industry on firm value created with a new expansion.

4.4.2. Small and large steps

Our theory so far suggests that depending on how distant a new investment is from core activities of a firm, different skills and capabilities may prove particularly valuable. The 'small steps,' i.e., expansions into areas closely related to core businesses of firms, have an exploitative character. Firms rely on their past experience and routines both when identifying opportunities for expansions into industries related to their specialization areas, and when actually undertaking them. This implies that the value of 'small steps' is particularly high when firms have much experience within the industry in question.

Conversely, when a firm takes a larger step, i.e., expands into an industry that is unrelated to its core activities, it will initially be constrained in its abilities to transfer and apply the current (dominant) routines to this new business. At the outset, there will be little overlap between what is represented in the firm's management dominant logic(s) and what may be needed to run the new business. These capabilities will need to be developed over time and through experience (but also – possibly – through adaptation and / or recombination of routines the firm might have developed and used in its operations in business areas 'remote' from core activities of firms). Early experiences on a new diversification path initiated after the firm took a 'large step' need to be interpreted and put into reusable form of routines before they can indeed help the firm to take a subsequent step on this path. However, if such new diversification path is followed further, over time and with subsequent expansions within the focal domain, the organizational experience base as well as the locus of specialization are likely to evolve. More expansions within the industry in question will

signify increasing importance of this industry to the firm, and may lead to the development of a new dominant logic. Should this happen, later steps on the diversification path will no longer be considered 'unrelated' expansions. The industry will be becoming more and more core to the firm, and new expansions within this industry will be more and more closely related to what is core to the firm. With more steps taken on this path, the firm's experiences will also become easier to reuse. The value of new expansions will then increase with within-industry experience of the firm. Formally:

Hypothesis 4a: Firm value created with a new expansion increases with the firm's experience in the given industry more strongly in the case of a related rather than an unrelated business entry.

While 'large steps,' i.e., unrelated expansions, may be difficult to take and to generate value from, some firms are successful when doing so (Markides & Williamson, 1996; Matsusaka, 1993; Penrose, 1995). Through the organizational learning theory lens, we would expect that these are the heterogonous, cross-industry experiences that help firms create value in such situations. Diverse experiences make a firm less likely to misapply past experiences, which is particularly important in novel investment situations, such as after a 'large step' on a new diversification route. Experiences across a range of industries may lead the firm to develop multiple sets of routines, which increases the likelihood that a 'large step' will not be as remote from what is recorded in the organizational experience base as in the case of narrowly experienced firms. This increases the likelihood that the firm will be able to 'absorb' and learn from such a new experience quickly (cf. Cohen & Levinthal, 1990). Broad experiences may also result in a large number of possible recombinations of pieces of organizational

knowledge derived from these past experiences, thereby increasing the potential set of information which the firm may rely on when expanding into unrelated fields.

Conversely, experiences across a variety of industries will not play such an important role in the case of expansions closely related to core activities of the firm, i.e. 'small steps.' In the case of a 'small step,' the firm is likely to have sufficient knowledge and well-established routines applicable to the industry in which it is expanding. This knowledge makes the firm less reliant on experiences from outside of this industry. Therefore, the firm is less likely to use and potentially misapply any of such outside-industry experiences. This makes the diverse experiences relatively less important in the case of expansions into industries related to core activities of firms as compared to unrelated expansions. Hence, we expect the following:

Hypothesis 4b: Firm value created with a new expansion increases with the firm's experience across industries more strongly in the case of an unrelated rather than a related business entry.

4.4.3. Greenfield investments and acquisitions

Another dimension along which diversification steps may differ is their mode. Similarly as expansions in close proximity to core activities of a firm (i.e., 'small steps'), its greenfield investments have an exploitative character. When expanding through internal development, the firm essentially transfers, applies, and replicates some of its routines and competencies, in an efficient way. Greenfield investments are especially valuable if the firm's industry-specific knowledge and technological assets are tacit and specialized, the more so if they form the basis of a core competence (and competitive advantage) of this firm (cf. Barkema & Vermeulen, 1998; Hennart & Park, 1993). A business domain is particularly likely to be a source of the core competence the more expansions the firm had in this industry prior to the

focal entry. In this case, internal expansions are most likely to contribute to firm value the more experience the firm has in the business domain in question. With increasing within-industry experience, the firm also becomes better capable of expanding on its own, as it does no longer need to rely on – typically difficult to integrate and manage – acquisitions as means of obtaining relevant knowledge. Long-term presence in an industry also implies that investment decisions can be planned with greater certainty and spread over time, which mitigates the fast-entry advantage of acquisitive growth.

Unlike greenfield investments, acquisitions share some of the exploratory features of 'large steps' on new diversification paths, and are particularly suitable for expansions into novel and unrelated industries. When expanding by means of acquisition, firms can substantially reduce the managerial and technical difficulties of entering a new industry (Penrose, 1995), as they may acquire technological capabilities as well as experienced management team, who understand the peculiarities of their industry. Thus, acquisitions may offer an efficient and fast way to refurbish firms' portfolios and to grow, in particular in early stages of expanding along a new diversification path, substituting for internal development.

However, in later stages, when industry-specific capabilities of firms become strong, the difficulties inherent in integrating target firms will become more pronounced (Barkema & Vermeulen, 1998), while the advantages of acquisitive growth will diminish. The very features that make acquisitions attractive as means of obtaining knowledge and experience early in the process of expansion into a new business domain – their inherent heterogeneity – makes them more difficult to handle as compared to internal expansions, and hence relatively less attractive in later stages. This is also because misapplication of prior experiences is more likely in the case of acquisitive growth than greenfield investments (cf. Haleblian & Finkelstein, 1999). Thus, cross-industry experiences are particularly helpful when expanding by means of acquisition.

For all the above reasons, we expect that with increasing within-industry experience, firms will be relatively more likely to create value when expanding by means of internal development rather than acquisition. Conversely, there will be additional value to past experiences across industries in the case of expansions by means of acquisition, as compared to greenfield investments. Formally:

Hypothesis 5a: Firm value created with a new expansion increases with the firm's experience in the given industry more strongly in the case of an internal development rather than an acquisition.

Hypothesis 5b: Firm value created with a new expansion increases with the firm's experience across industries more strongly in the case of an acquisition rather than an internal development.

4.5. Methodology

4.5.1. Sample

To test the hypotheses, we collected data on expansions within and across industries of companies listed on the main segment of the Amsterdam Stock Exchange. No data were gathered on expansions of financial institutions and the four largest firms (Royal Dutch Shell, Philips, Unilever, Akzo), as they differed considerably from the other firms in terms size, international experience, and scope of activities, leaving 25 companies. The companies were active in a wide variety of industries. Over the sample period, the average number of employees of these firms exceeded 12,000, and their average sales approached EUR 1.7 billion.

We collected data on all expansions of these companies within and outside of their core businesses. This information was originally sourced from lists of actively managed subsidiaries published by the sample firms in their annual reports and from announcements they made in the Dutch financial daily, *Het Financieele Dagblad*. We carefully compared press releases with annual statement data in order to exclude pure portfolio investments from the analyses. A total of 968 new expansions recorded both in financial press and annual statements were identified. We then used the press announcement dates and changes in stock prices around them to measure firm value created with new expansions, using the event study methodology. Disclosures of expansions that coincided with announcements of other venture formations of the same company (either on the previous, the same, or the next day) were excluded from analyses to avoid the distorting effects of contamination on the focal announcements. After accounting for these necessary exclusions and any missing data, the sample used to test our hypotheses was reduced to 623 observations.

Next, in order to quantify within- and cross-industry experience of the parent firms, data on all their prior expansions undertaken since 1966 were collected from their annual reports. We chose 1966 as the base year because it marked the beginning of a period of considerable growth for the Dutch companies in the sample, and because older annual reports were often concise (i.e., lacking the required information) and / or difficult to obtain. Annual reports were also the source of accounting data used in the analyses.

4.5.2. Analysis

In order to test the hypotheses concerning firm value created with a new expansion, we employed a three-step methodology. In the first step, we used the event study approach to generate the dependent variable. In the second step, we computed a sample selection correction term to empirically account for potential selection of observations depending on

availability and quality of data needed to generate the dependent variable. If not accounted for, such selection might have led to biased results in our final models, which we estimated in the third step. More specifically, we ran a series of second-order regressions, in which we tested our hypotheses on firm value created through expansions within and across industries. Below we explain the three steps in more detail.

Step 1: Event study. In order to obtain the dependent variable, i.e. firm value created with a new expansion, we used the event study method. This approach (cf. Fama, 1976; McWilliams & Siegel, 1997) rests on the assumption of semi-strong stock market efficiency. Thus, we assume that changes in share prices around corporate announcements provide unbiased assessments of their economic consequences from the perspective of the company's shareholders (Fama, 1976). In line with our theory and hypotheses, the use of event study method allows us to capture how much additional value a firm creates when taking a step on a diversification route.

Consistent with most prior research, we calculated abnormal returns using the market model (Fama, 1976; McWilliams & Siegel, 1997). For each new expansion we regressed the company's daily stock returns of each of the sample firms on a benchmark index over a period of 121 trading days (approximately 6 months, from t = -136 to t = -16, where t = 0 was the announcement day of the new expansion in *Het Financieele Dagblad*). The benchmark chosen for this study was the Amsterdam Stock Exchange (AEX) index. Since AEX index was only initiated in 1983, stock prices around announcements of expansions from the 1973-1982 part of the sample period were regressed on AEX-equivalent index calculated by Datastream, our source of stock market data.[14] Abnormal returns were calculated as a

[14] Stock returns were adjusted for capital changes and dividend payments. The returns were calculated in logarithmic terms to make the departure of daily data from normality less severe (Fama, 1976). Similarly, the benchmark index returns were in logarithmic form.

difference between returns predicted by the market model and share prices actually observed on focal trading days. In the regression analyses (Step 3), we used the cumulative abnormal returns over the days $t = -1$ and $t = 0$ as the dependent variable. Thus, we accounted for potential early information arrival, for instance for new expansions that were announced before the stock market closed on the day prior to the publication in *Het Financieele Dagblad*.

Step 2: Correcting for potential sample selection problem. On theoretical grounds alone, we cannot dismiss the possibility that our sampling procedure resulted in a set of observations not fully representative of the sample firms' expansions. In fact, from annual reports we identified as many as 1975 new ventures set up over the sample period. Only about half of them (968) were announced in financial press. 190 of those were contaminated announcements, and hence could not be used in the empirical analyses.[15] If there was a systematic reason why some of the expansions were announced simultaneously (instead of one by one) in financial press or not announced at all in the course of the fiscal year (and only appeared listed in the annual statements), the regression estimates might be biased as a result of sample selection on the dependent variable (cf. Greene, 2003; Heckman, 1979).

Therefore, we generated Heckman's correction term (Heckman, 1979), and used it as an additional regressor in our models. The term was based on a probit model for the probability of a new expansion being individually announced in *Het Financieele Dagblad* (as opposed to not being announced there at all or being announced together with another venture or ventures). The explanatory variables were: the number of other expansions a parent firm had in the same year, the number of all prior international expansions, the number of all prior domestic expansions, and three dummy variables capturing whether an expansion was partly

[15] Additional 145 observations could not be used due to missing data, mainly stock prices – a particularly problematic issue in the beginning of our sample period – and information on business relatedness of new expansions.

or wholly owned, whether it was a greenfield investment or an acquisition, and whether it was international or domestic.

Step 3: Models of firm value created with new expansions. In the third step of our analyses, we employed the cumulative abnormal returns as the dependent variable within a sample selection corrected, second-order regression framework (Aiken & West, 1991; Greene, 2003; Heckman, 1979). The model parameters were estimated using a modified OLS regression procedure, where we controlled for potential heteroskedasticity problems using the White covariance matrix estimator, with an additional adjustment for within-group dependence of observations in the sample (the 'cluster' procedure, StataCorp, 2001). This allowed us to account for firm-specific effects. Our hypotheses on the value created with new expansions were tested using simple and interactive terms. Therefore, following suggestions of Aiken and West (1991), we mean-centered all continuous independent variables. This allowed us to mitigate collinearity problems typically arising when interactive terms are estimated, and facilitated interpretation of model coefficients. Thanks to mean-centering, the estimated coefficients showed directly how a given variable related to abnormal returns at mean levels (rather than zero values) of other mean-centered variables involved in a given interaction. Collinearity problems were not present in our models, as indicated by all variance inflation factors being well below the 10 cut-off point, and average values of these factors not exceeding 2.7 in any of the models.

4.5.3. Independent variables

Within-industry experience of a firm was measured as the number of subsidiaries the firm established within a particular industry since 1966 and prior to the focal entry. We defined industries as unique 3-digit SBI codes (the Dutch equivalent of SIC codes).

Experience across industries was measured as the number of unique 3-digit SBI codes the firm has ever been active in since 1966 and prior to the focal entry. Consistent with our theory, this measure explicitly accounted for parent firm experiences not only from industries in which it operates currently, but also for experiences from industries no longer represented in the business portfolio.

Related and unrelated expansions. Expansions within and across industries were coded as either related or unrelated based on their business relatedness with core activities of the sample firms, as defined in their annual reports and confirmed by sales and revenues data. Hence, the set of core activities of each parent firm was allowed to change over time. We created a dummy variable equal to one for unrelated entries, and zero otherwise, where unrelated entry was neither in the same 2-digit SBI-code category as core activities of the firm nor within the value-added chains of these core activities. This operationalization is in line with the 'basic areas' notion of Penrose (1995, p. 109), and the 'dominant logic' concept of Prahalad & Bettis (1986), where unrelated expansions are those in a new 'basic area' and those that cannot be served by the current dominant logic of the firm (which in its turn is shaped by core activities of the firm).

Greenfield investments and acquisitions. To capture the mode of expansion within and / or across industries, we created a binary variable equal to one when the expansion was undertaken by means of acquisition, and zero otherwise. Relevant information was sourced from annual reports and financial press releases.

Firm-specific control variables. Since large firms may be more likely to fully own their new ventures than small ones, and since the incremental value effects may be relatively small in large firms, we controlled for firm size, using the natural logarithm of the book value of the parent firm's assets for the year prior to the year of the focal expansion, expressed in thousands of Dutch guilders and adjusted for consumer price index changes. We also controlled for the firm's

financial leverage (measured as the ratio of total liabilities to assets), since it may relate to the firm's performance and ability to invest in new ventures (Jensen, 1986), in particular when diversifying (Mansi & Reeb, 2002). Next, we controlled for the firm's profitability, using the return on equity ratio (ROE), as availability of resources may explain why a firm expands within and across industries (cf. Campa & Kedia, 2002; Jensen, 1986).

Much prior research stressed the importance of multinational diversity and experience of firms for their ability to benefit from business diversity (e.g., Geringer et al., 2000; Hitt et al., 1997; Tallman & Li, 1992; Wan & Hoskisson, 2003). Therefore, we controlled for within- and cross-country experiences of firms, as well as their interaction. Within-country experience was measured as the number of entries a firm made into various businesses in a given country since 1966 and up to a year prior to the focal entry. Experience across countries was a count of the number of countries a firm has ever been active in since 1966 and up to a year prior to the focal entry (compare Chapter 3).

Finally, as explained earlier, potential systematic firm specific-effects were accounted for through the use of clustering estimation procedure (StataCorp, 2001).

Expansion-specific control variables. Using binary variables, we controlled for two key characteristics of new entries studied in this paper. First, to capture potential systematic differences in value-creation capabilities of partly versus wholly owned subsidiaries, we used joint venture dummy variable, which was equal to one if the focal entry was partly owned by the parent firm, and zero otherwise. Second, to account for possible differences in value of expansions within the Netherlands and abroad, we used international entry dummy variable, which was equal to one if the focal entry was outside of the Netherlands, and zero otherwise.

Other control variables. As firm value creation upon expansions within and across businesses may change over time (cf. Montgomery, 1994), we included year dummy variables

in our models. Finally, as explained earlier, Heckman's lambda to correct for potential sample selection on the dependent variable was included.

The means, standard deviations, and correlation coefficients of the variables are presented in Table 4.1.

4.6 Results

4.6.1. Hypotheses testing

Estimation results are presented in Table 4.2. Hypothesis 1, which predicted that within-industry experience helps firms to create value when expanding in this domain, was directly tested in Model 1. It received substantial empirical support, also in other models reported in Table 4.2. Similarly, our data corroborated Hypothesis 2, which implied that when expanding within and across businesses, firms create more value the more experience across industries they have. We also found support for Hypothesis 3, in which we postulated that experience across industries reinforces the positive impact of within-industry experience on firm value created with new expansions.

Hypotheses 4a and 4b were tested in Models 2 and 3, respectively. Consistent with our theory, the estimate of the interactive term between within-industry experience measure and dummy variable for unrelated expansion appeared significantly negative ($p < .05$, Model 2), suggesting that within-industry experience of firms is relatively more valuable in the case of expansions into businesses related to their core activities than into unrelated areas. We did not find empirical support for Hypothesis 4b (Model 3; the interactive term of experience across industries with unrelated entry dummy variable), implying that firm experience across industries is equally valuable in cases of entries into businesses related to core activities of firms as in the case of unrelated expansions.

Table 4.1. Means, standard deviations, and correlations [a]

		Mean	S.d.	1	2	3	4	5	6	7	8	9	10	11	12
1	Abnormal returns	.003	.022												
2	Within-industry experience	14.645	15.610	.017											
3	Experience across industries	12.892	6.189	.003	-.153										
4	Unrelated expansion	.128	.335	-.021	-.190	.053									
5	Acquisition	.856	.352	.018	-.072	-.089	.021								
6	Firm size	13.376	.861	-.035	.128	.434	-.045	-.121							
7	Leverage	.582	.391	.011	.012	-.014	.056	.026	.166						
8	ROE	.177	.129	.000	.377	-.189	.089	.133	-.048	.016					
9	Within-country experience	12.568	16.299	-.016	.047	.188	.211	.123	.054	-.056	.082				
10	Experience across countries	14.846	7.133	-.095	.207	.314	-.027	-.181	.424	-.032	-.098	.006			
11	Joint Venture	.353	.478	-.033	.021	.029	-.013	-.442	.098	-.020	-.175	-.155	0.101		
12	International expansion	.750	.434	.052	.152	-.053	-.133	-.079	.099	.054	.113	-.721	0.149	.071	
13	Sample selection correction term	.614	.226	-.029	.201	.246	.048	.431	.258	.035	.306	.046	0.167	.072	.300

[a] The mean values are for raw (non-centered) variables. Centering has no impact on standard errors and correlation coefficients.

Table 4.2. Results of regression analyses of cumulative abnormal returns [a]

	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
Within-industry experience	.95*	(.50)	1.11*	(.49)	1.03*	(.48)	3.37***	(.94)	.95*	(.50)	3.53***	(.95)
Experience across industries	4.00**	(1.35)	4.09**	(1.37)	4.52**	(1.42)	3.98**	(.24)	3.14†	(2.02)	4.06*	(1.95)
Within x across industry experience	.15*	(.08)	.17**	(.09)	.11†	(.08)	.11†	(.07)	.15*	(.08)	0.09	(.08)
Within-industry experience x Unrelated expansion			-2.74*	(1.33)							-2.33*	(1.28)
Experience across industries x Unrelated expansion					-8.21	(6.44)					-7.47	(6.56)
Within-industry experience x Acquisition							-2.93**	(1.15)			-2.86*	(1.21)
Experience across industries x Acquisition									1.14	(2.54)	.62	(2.40)
Unrelated expansion	-9.22	(28.64)	-30.80	(21.86)	-2.25	(31.53)	-10.97	(28.19)	-9.36	(28.75)	-23.01	(27.09)
Acquisition	74.00†	(41.90)	74.11†	(42.29)	73.73†	(41.61)	75.53†	(39.85)	73.39†	(42.36)	75.01†	(40.45)
Firm size	.51	(8.78)	-0.29	(8.84)	-.48	(9.12)	-.39	(8.44)	.65	(8.70)	-1.87	(8.65)
Leverage	8.59	(17.50)	10.28	(17.31)	9.62	(17.42)	11.12	(17.93)	8.14	(17.68)	13.19	(17.83)
ROE	41.81	(70.87)	36.96	(69.71)	24.03	(68.04)	49.78	(73.28)	43.86	(71.44)	30.42	(70.21)
Within-country experience	.86	(.92)	1.04	(.92)	.86	(.92)	.89	(.91)	.85	(.93)	1.03	(.92)
Experience across countries	-3.77**	(1.11)	-3.92***	(1.10)	-3.96***	(1.11)	-4.01***	(1.05)	-3.81**	(1.10)	-4.33***	(1.04)
Within x across country experience	.16*	(.06)	0.15*	(.06)	.17*	(.06)	.16*	(.06)	.16*	(.06)	0.17*	(.06)
Joint Venture	24.51	(25.09)	25.75	(25.59)	25.34	(25.70)	23.77	(25.60)	24.88	(24.83)	25.81	(26.45)
International expansion	78.57†	(41.14)	85.40†	(41.94)	78.04†	(40.62)	78.70†	(40.65)	78.53†	(41.25)	83.99†	(41.35)
Sample selection correction term	-180.3**	(55.34)	-181.2**	(56.57)	-183.1**	(53.65)	-173.3**	(53.71)	-180.5**	(55.01)	-176.82**	(52.91)
Intercept	(7395)†	(3800)	7568†	(3804)	8063*	(3812)	(7050)†	(3926)	7455†	(3765)	7845†	(3884)
Time dummy variables	Included		Included		Included		Included		Included		Included	
F-statistic	65.39***		52.07***		41.51***		137.27***		124.69***		698.62***	
R-squared	.06		.06		.06		.07		.06		.07	

[a] N = 623. Robust standard errors adjusted for clustering (firm-specific effects) are in parentheses. Parameter estimates and standard errors are multiplied by 10^4. Significance levels are one-tailed for predicted effects and two-tailed otherwise.

† $p < .10$ * $p < .05$ ** $p < .01$ *** $p < .001$

We tested Hypotheses 5a and 5b in Models 4 and 5, respectively. The significantly negative interactive term between within-industry experience construct and 'Acquisition' dummy variable in Model 4 indicated that such experience is relatively more valuable when firms expand through internal growth rather than acquisitive growth. This is in line with Hypothesis 5a. We failed to find support for Hypotheses 5b, which predicted that broad industry experiences should be relatively more valuable in the case of expansions by means of acquisitions rather than greenfield investment (Model 5; the interactive term of experience across industries with 'Acquisition' dummy variable). We also estimated a full model (Model 6), which corroborated earlier results, however now the effect implied by Hypothesis 3 fell just outside of the 10% significance level (*p*-value equaled .12).

It is worthwhile noting that in none of the models unrelated expansions appeared to create systematically less value than related expansions, as indicated by the insignificant coefficients by unrelated expansion dummy variable. This is in contrast with much prior research but consistent with our theory, which suggested that both 'small steps' and 'large steps' may prove valuable, provided the parent firm has the right set of experiences on which it can rely when expanding within and across industries.

4.6.2. Additional analyses

An underlying assumption behind our current measure of firm experience across industries is that each past entry into a new industry brings equal amount of usable knowledge to the firms. An opposite extreme would be to assume that only industries that are currently represented in firm's portfolios bring usable experiences. While realistic values of experience across industries are somewhere in between these two extremes, a reliable measure is difficult to construct. Therefore, we conducted sensitivity analyses, using an alternative measure of experience across industries, in which we counted the number of unique 2-digit SBI codes

firms were active in, in the year prior to the year in which the focal expansion was undertaken. Additional analyses provided results analogous to those obtained using our core measure of experience across industries, with Hypothesis 2 now only marginally supported, and Hypothesis 3 unsupported, however. This suggest that these are more likely past experiences from all industries ever expanded into, rather than experiences from industries currently present in, that matter for firm capabilities to correctly apply or disregard past experiences and create value when expanding again. An alternative and consistent with our theory interpretation of these findings is that this is not the scope of current activities that matters for firm capabilities to create value when expanding within and across industries, but the combined industry scope of past and current experiences. This underlies the importance of considering corporate histories when investigating the diversity-performance relationship.

We also conducted additional analyses using non-linear measures of experience within and across industries. Quadratic and cubic effects were not present, and we did not observe diseconomies of scale and scope in our sample. Next, we used logarithmic forms of the two experience variables. Apart from Hypothesis 1, all previously reported results were replicated, albeit at lower significance levels. This may suggest that the value of additional units of within-industry experience is not subject to diminishing returns from experience in our sample. Even though two of the sample firms went bankrupt within the window of analysis, what we may witness in fact in this sample is successful management of business portfolios, where firms stop expanding into or even abandon industries where they see no superior opportunities any longer. Another explanation may be that – even if decreasing – the incremental improvements in routines that result from additional units of within-industry experience bring about efficiency gains in more and more subsidiaries of the firm. This may explain the observed linear rather than non-linear impact of within- and cross-industry experiences on the value of the sample firms.

Since organizational form may foster or inhibit the benefits from expansions within and across industries (cf. Helfat & Eisenhardt, 2004; Markides & Williamson, 1996), we expanded our models to include binary variables through which we distinguished among sample firms adopting divisional, geographic, and matrix structures. Organizational structure effects were statistically not different from zero, other results remaining virtually unchanged.

Next, we considered potential impact of firm entry mode experience on value created when expanding by means of greenfield investments and acquisitions. If capabilities to expand internally versus through acquisitions were important determinants of firm value creation when expanding within and across industries, our results might be biased due to the omitted variable problem. Therefore, we measured parent firm experiences with start-ups and acquisitions prior to the focal entries by counting the number of past greenfield expansions and acquisitions the firms undertook prior to the year of the focal entry, respectively. We included these measures as additional regressors in our models, and the estimates appeared insignificant, other results remaining unchanged.

We also tried an alternative way to control for time-specific effects. We generated a trend variable (a year count) and its 4^{th} degree orthogonal polynomial, which were then used as control variables in our models. While trend effects appeared unimportant determinants of firm value, empirical support for our hypotheses remained unchanged. Furthermore, as firm value creation may depend on external conditions, we run alternative models controlling for the wealth and growth rate of country-of-entry, using GNP per capita and its growth rate as proxies. We also created a dummy variable equal to one if an entry was into a developed country, as opposed to developing or transitional one (coded as zeros). Additional analyses did not qualitatively change the support for our hypotheses received originally, while reducing sample size due to missing data.

Finally, we took account of the fact that firm value effect of a new expansion announcement may be confounded by other value-relevant news released by the firm. We distinguished among four qualitatively different types of such potentially value-relevant announcements, and screened *Het Financieele Dagblad* issues published three weeks prior to and after the announcement date of the focal expansion to determine whether these types of announcements had been made or not. The types of announcements were the following: profitability-related announcements (for example, profit warnings); announcements of other expansions; changes in the ownership of non-focal ventures; and more general changes in strategy. We then created dummy variables capturing whether a given type of announcement was made by the focal firm around the time when news about establishing a new venture appeared in financial press. Subsequently, three of these dummy variables were included in our models as additional control variables. None of the confounding effects proved statistically significant, other results remaining qualitatively unchanged.

4.7. Discussion and conclusions

Expansions within and across industries are part of every-day business of many firms striving for survival in the globalizing and increasingly more competitive world. Hence, much research in a variety of theoretical traditions has been done into what level of business diversity translates to good performance. Yet, relatively little attention has been paid to individual expansion moves by means of greenfield investments and acquisitions. In this paper, we took organizational learning perspective to propose a theory on what helps firms create value when expanding within and across industries.

Building on the idea that diversification of firms should be regarded as a learning process in which a firm develops and subsequently deploys appropriate routines and operating logics, we proposed that the value of individual diversification moves depends on the firm's abilities to (1) identify and successfully exercise superior investment opportunities; and (2) correctly apply (or disregard) its past experiences when doing so. This led us to hypothesize that past experiences within the focal industry and across a variety of industries are particularly valuable, the more so if in combination with each other. Furthermore, we argued that different types of organizational experience are relatively more or less valuable for different types of steps firms may take on their diversification routes. 'Small steps' (expansions into businesses related to core activities of firms) and greenfield investments were expected to be particularly valuable with increasing experience of firms in the focal industries. Conversely, 'large steps' (unrelated expansions) and acquisitions were predicted to result in most additional value if firms had much prior experience across industries.

Our predictions were tested using a three-step methodology. In the first step, we employed the event study method to generate the dependent variable, i.e. shareholder wealth created with expansions within and across industries. In the second step, we used an estimation procedure suggested by Heckman (1979) in order to account for potential sample selection on the dependent variable. Finally, six second-order regression models explaining firm value creation were estimated. The results corroborated most of our predictions, while revealing areas in need of further investigations.

In particular, we failed to support Hypotheses 4b and 5b, in which we expected cross-industry experience to be particularly valuable for unrelated (rather than related) expansions and for acquisitions (rather than greenfield investments), respectively. The logic underlying these hypotheses was that expansions of a rather exploratory character, such as entries into unrelated businesses and acquisitions, might lead to negative performance

outcomes. We argued that due to the novelty and heterogeneity of such expansions, past experiences are more likely to be misapplied than in cases of related industry entries or greenfield investments. An alternative logic would be that broad experiences across industries provide multiple possibilities to recombine existing elements of organizational knowledge to create new elements (cf. Kogut & Zander, 1992). This may be particularly helpful when expanding into novel fields (where little past experience is available to rely on) and / or through internal growth (where it is difficult to generate new knowledge by other means). It is likely that these two effects – the risk of misapplication of past experience and the chance for new knowledge creation through recombination – are at work simultaneously. This may lead to no clear advantages of one type of expansion over another with increasing experience across industries. Future research into these issues may prove fruitful.

Consistent with our theory, but unlike in many prior studies, we found no systematic differences in value creation capabilities of related versus unrelated expansions. While the former are more certain and more likely to succeed, the latter may have relatively higher option value for firms, which may result in – on average – comparable value of the two types of steps on diversification routes. There may also exist important contingencies for value creation capabilities of new expansions into related and unrelated industries. In this paper, we discussed one set of such contingencies: parent firm experience in the focal industry and across industries. Future research may investigate other potentially important contingencies, for example related to organizational capabilities, such as capabilities to undertake and manage related and unrelated expansions, but also contingencies pertaining to characteristics of new ventures.

Perhaps these are specifically the features of new expansions – in combination with parent firm capabilities – that may lead to value creation or destruction. In the context of international growth, it was shown that expansions involving single- rather than

double-layered acculturation are more likely to be successful (Barkema et al., 1996). In the context of firm growth within and across industries, a third layer of acculturation may be involved, where international acquisitions or joint ventures in unrelated businesses would be considered most difficult to handle, while domestic wholly owned and internally developed expansions in related businesses – the least difficult. It remains an open question what the value-optimal combinations of venture characteristics would be.

Another intriguing question that remains unanswered is what happens after firms initiate new diversification paths. Our theory implies that after initial trials on a new path, a firm's managers should be able to judge the path's value-creation potential and either choose to follow this path or abandon it. Should they choose to expand further along this track, a now-unrelated business may soon become a related or even a core activity of the firm. Exploratory analyses of our data reveal that, over time, some initially unrelated industries become related to core activities of firms, and some related become core themselves, while others are abandoned. This suggests that core activities of firms evolve over time and with organizational experience, such that some industries represented in corporate portfolios appear closer and closer to what constitutes core activities of the firms, while other industries become less important (cf. Van Kranenburg et al., 2001). Hence, as current performance of firms reflects their past decisions, the relationship between their business diversity and performance may in fact depend on the past evolution of their portfolios and business 'cores.'

Evolution of corporate portfolios promises to be an interesting avenue of future research. For example, we lack understanding of how new core businesses emerge, how firms enter and exit industries (cf. Chang, 1996), how this relates to their performance, etc. We also do not understand how corporate performance depends on the dynamic aspects – such as for example pace and rhythm (cf. Vermeulen & Barkema, 2002) – of the process of firm growth within and across industries. Understanding the rules of successful evolution of corporate

portfolios might be useful in clarifying the diversification-performance relationship (cf. Matsusaka, 2001).

Our understanding of corporate expansions within and across industries would also be enhanced by proper accounting for the context of such expansions, for example dynamism and uncertainty of the environment, as different steps on diversification routes may be more or less appropriate in different situations. Moreover, experiences from a single but turbulent industry may not necessarily be 'narrow,' in particular when compared to experiences across a number of stable industries that are not much different from one another. Firms may also occupy multiple niches within an industry (cf. Tanriverdi & Venkatraman, 2005), which may equip them with diverse experiences as well. Furthermore, heterogeneity or homogeneity of industry experience is also subject to trends over time, where periods of growth may bring about experiences that are incomparable to those from periods of stagnation or decline. These and other potential sources of heterogeneity of industry experience of firms, and their relationship with performance and value creation, need to be further researched.

Finally, passage of time may be an important determinant of availability and usability of past experience. For example, it can be expected that experiences distant in time are more likely to be ignored by firms than recent experiences. Our analyses of two alternative measures of experience across industries showed that these are both current and past experiences that matter for firm capabilities to create value when expanding within and across industries. However, whether past experiences become too remote in time and too irrelevant (given the current investment situation) to be relied on, and how this may change the impact of within- and across-industry experiences on firm value creation, remains an open question.

Our study is not without limitations. First, it empirically explored firms originating from one country, the Netherlands. Future research that either examines firms originating from another country, or from a number of countries, would add to the current study. Second,

in our empirical analyses we relied on the event study method, which some criticize on grounds of its underlying assumption that investors adequately evaluate the long-term implications of strategic decisions of firms in the short period surrounding the event. While research in the field of finance does support this assumption (Fama, 1998; Malkiel, 2003), and there is considerable evidence in prior literature that event study method has predictive validity (e.g., Healy et al., 1992; Kale et al., 2002), future studies could test our hypotheses using alternative dependent variables, such as subsidiary survival or managerial evaluations of new venture performance. Finally, already Penrose (1995) recognized that diversification may involve departure from a firm's existing activities in terms of entering new (product or geographic) markets, new technology areas, or both. Future research distinguishing between technology and market diversifications would clearly improve upon our study.

Chapter 5

Conclusions

5.1. Key findings

In an era of rapid technological progress and major political and economic transformations across the globe, changes in geographic and product portfolios of firms become more of a rule than an exception. Hence, much research in a variety of theoretical traditions has been conducted in order to determine which strategies and entry modes firms choose, and how they perform as a consequence. Comparatively little attention was paid to how organizational experience bases are developed and used as companies expand into a variety of countries and industries. Prior research in this tradition suggested that strategic choices are path-dependent and that this path-dependence is a key factor that ties organizational learning to performance as firms move along their chosen expansion paths (cf. Bettis & Prahalad, 1995; Teece et al., 1994; Vermeulen & Barkema, 2001, 2002). Importantly, however, the strategic choices and organizational learning do not occur in a vacuum. Conditions under which an investment is attempted – such as environmental uncertainty or the novelty of a task to be undertaken – play a major role in determining which past experiences of firms are relevant and which should be disregarded, as only the use of relevant experience can bring about positive performance outcomes (cf. Haleblian & Finkelstein, 1999; Levitt & March, 1988). The three studies presented in this thesis contributed to prior literature by explicitly addressing the issue of what types of experience are particularly helpful in different investment situations.

More specifically, building on organizational learning theory we considered three types of strategic decisions of firms: formations of IJVs, international expansions in general, and expansions within and across industries. When considering the impact of strategic expansions on firm value, we explicitly took into account characteristics of a given investment situation. In Chapter 2, the key claim was that minority IJVs and majority IJVs

differ in qualitative and quantitative terms. The quantitative difference was that in equity stake. We argued that small stakes (minority IJVs) imply relatively low amounts of physical and managerial resources committed to a venture – and hence put at risk – as compared to large stakes (majority IJVs). At the same time, minority and majority IJVs alike allow firms to secure toeholds in foreign markets. This led to the prediction that the larger the environmental uncertainty and the more novel an investment situation is, the larger increases in firm value will be observed upon formations of minority IJVs as compared to majority IJVs. The qualitative differences between the two types of IJVs, however, implied that experiences with minority IJVs are not necessarily applicable when expanding by means of majority IJVs and vice versa. This led to predictions regarding preferences of firms to expand using either minority or majority IJVs, but also regarding relative differences in firm value creation capabilities of the two types of ventures. Extensive empirical test supported most of these predictions.

In Chapter 3, we focused further on the role of organizational experience in foreign growth of firms. Based on theoretical arguments, two distinct attributes of international experience were identified: its depth (measured as the number of prior expansions of a firm in a host country) and breadth (measured as the number of host countries into which the firm ever expanded). We predicted that the generally positive role of experience depth is reinforced by its breadth. Additionally, the role of international experience was shown to be conditional on characteristics of host countries, such as political hazards, economic risk, and cultural factors. While past experience from particularly challenging locations appeared to be helpful when expanding into similarly demanding countries (with respect to cultural or economic factors, for instance), past experience from less challenging locations proved to have a liability effect in such investment situations. The empirical evidence corroborated some of these theoretical predictions, while revealing areas in need of further investigations.

Finally, Chapter 4 looked and content and applicability of organizational experience from the perspective of corporate expansions within and across industries. Theoretical reasoning led to predictions that past experiences from a given industry as well as from a range of industries, in particular when in combination with one another, help firms create value when expanding. Yet, we also found that different types of experience lend themselves best to different types of expansions. Firms attempting exploratory investments (such as acquisitions and entries into businesses unrelated to core activities of the firms) were expected to be particularly likely to succeed – in terms of value creation – if they had broad experiences from other industries. Conversely, within-industry experiences were relatively more valuable in cases of exploitative expansions, such as greenfield investments and entries into businesses closely related to core activities of firms. Empirical tests supported most of these predictions.

Overall, research presented in this thesis reinforced the idea that organizational experience is multifaceted, and that different types of experience are applicable in different investment situations (cf. Anand & Khanna, 2000; Haleblian & Finkelstein, 1999; Levitt & March, 1988), as characterized by environmental conditions and features of particular expansion moves. Value-focused firms should best aim at developing repositories of experiences and routines that would not only help them to perform well in the next time period, but – and perhaps more importantly – ones that would not constrain their future learning and adaptation to new conditions (cf. Levinthal & March, 1993). This is particularly important in the changing world, where exploratory strategies and 'probes' (cf. Brown & Eisenhard, 1997) are often used to keep up with competition. Successful execution of such strategies requires both efficient routines, which can be developed thanks to deep knowledge of a given market, and broad knowledge bases, which lend themselves well to recombination (cf. Kogut & Zander, 1992), and are a good ground for absorbing incoming information (cf. Cohen & Levinthal, 1990).

5.2. Limitations and future research

Much future research is needed to further our understanding of the mechanisms through which organizational experience helps or inhibits firm value creation by various means and in a variety of contexts. In sections 2.8, 3.7, and 4.7, we already discussed a number of limitations of research presented in this thesis, as well as several areas where future investigations may prove fruitful. In addition to those considerations, it should be stressed here that the view of the role of organizational experience in corporate expansions and firm value creation presented in this thesis is by no means complete. For example, geographic and product portfolios of firms are as much a result of new investments as *divestments.* Over time, firms tend to replace businesses in their portfolios with ones they consider more valuable, in particular if growth opportunities within their current portfolios are less attractive than those outside of their portfolios (cf. Chang, 1999; Penrose, 1995; Van Kranenburg et al., 2001). Research into patterns of exit from and entry into new product and geographic markets would be relevant from theoretical and practical standpoints alike.

Research presented in this thesis also showed that it is important to consider the *content* of organizational experience when investigating its relationship with choices, performance, and value of firms. While some ways of doing so have already been proposed in this thesis, future studies into the content of experience are warranted. For example, our concept of the diversity of experience across industries (Chapter 4) could be further refined to accommodate the idea that some industries are more heterogeneous than others. Indeed, experience from two mature industries is not necessarily as diverse as experience from two growing industries. Similarly, experience from different countries may be more heterogeneous than assumed in our measure of international experience breadth (Chapter 3), also when refined to distinguish among particularly 'challenging' locations and those less

'challenging' ones. Finally, fine-grained analyses of entry mode experience are called for. In Chapter 2, we showed that experiences from minority IJVs are not necessarily applicable to majority IJVs and vice versa. Relatedly, Haleblian and Finkelstein (1999) showed that experience with acquisitions is heterogeneous and subject to misapplication. It remains an open question how heterogeneous experiences with (wholly or partly owned) greenfield investments are, and what firms may learn from expansions into related industries (where key differences may exist between horizontal and vertical entries, for example).

Our understanding of the relationship between organizational performance and strategic decisions of firms would be further enhanced if more attention were paid to the *context* in which those firms operate and where their repositories of capabilities are developed. Research presented in this thesis was based on observations of the Dutch multinationals. An interesting question to ask would be how firms originating from less stable economies, such as former socialist nations or developing countries, may benefit from their experiences. Intuitively, we may expect that domestic experiences of firms that survived a transition from communist state system to market economy are more diverse than (domestic) experiences of their equivalents originating from developed countries. How this changes their strategies and performance remains an open question. Qualitatively, similar differences may exist between firms whose core industries are stable and mature versus those operating mainly in hypercompetitive environments. Within-industry experience in the former case is probably less heterogeneous than in the latter case. Investigating the strategy-performance relationship across a variety of contexts promises to be a fruitful area for future research.

Finally, we also do not understand *how* firms learn from their experiences (and possibly from other sources). Do the locus of experience, experience age, timing, etc., impact its transferability and usability? While these and other questions are beyond the scope of this thesis, opening the black-box of organizational learning would help us to understand how

companies may acquire the skills and routines that would prove most useful in the globalizing world.

Methodologically, research presented in this thesis relied on data from a fairly limited number of Dutch companies. Moreover, the core empirical analyses – those of firm value changes upon corporate expansion announcements – were conducted using the event study method. Replicating this research in other national and industrial settings, as well as using other measures of firm performance, for example by analyzing subsidiary survival or taking the approach to verifying event study method suggested in Chapter 2, would help establishing to what extent our results are specific to the context and method used.

Samenvatting

(Summary in Dutch)

De belangrijkste trends in het economische landschap gedurende de laatste decennia zijn de snelle technologische vooruitgang, het openen en de liberalisering van nieuwe interessante markten (zoals China en de voormalige communistische landen) en de toenemende globalisatie (Hitt, Keats, & De Marie, 1998). Deze trends hebben geleid tot wat men het 'new competitive landscape' noemt (Bettis & Hitt, 1995; Hitt et al., 1998), waarin beslissingnemers in bedrijven geconfronteerd worden met grote strategische uitdagingen tengevolge van onzekerheid, ambiguïteit en complexiteit. Bedrijven reageren verschillend op deze nieuwe uitdagingen. Sommige bedrijven maken bijvoorbeeld gebruik van coöperatieve strategieën (Brown & Eisenhardt, 1997) terwijl andere gebruik maken van het benutten van wereldwijde markten (Mitchell, Shaver, & Yeung, 1992, 1993) of het wijzigen van hun assortiment aan producten (Bettis & Prahalad, 1995; Delios & Beamish, 1999; Markides & Williamson, 1996).

Het succesvolle gebruik van zulke strategieën en het overleven van bedrijven op de lange termijn in een competitieve en globale wereld maakt het noodzakelijk dat bedrijven de nodige vaardigheden en kennis bezitten. Ondanks dat leren van ervaringen een van de belangrijkste manieren is om een waardevol repertoire van routines en kennis op te bouwen (Cyert & March, 1963; Levitt & March, 1988; Nelson & Winter, 1982; Penrose, 1995), is het eerdere onderzoek dat kijkt naar wat bedrijven kunnen leren van verschillende soorten ervaringen en naar wat hen helpt om deze verwoven kennis succesvol toe te passen in verschillende investeringssituaties (cf. Haleblian & Finkelstein, 1999) erg beperkt. Het kan geargumenteerd worden dat bedrijven die succesvol zijn in een bepaald type omgeving, zoals een bepaalde industrie, land, cultuur, enz., niet noodzakelijk succesvol zijn met deze zelfde strategie en routines in een ander soort omgeving. De drie studies in dit proefschrift leveren een bijdrage tot de voorafgaande literatuur door expliciet het probleem te adresseren welke strategieën en routines bedrijven succesvol maken in een veranderende wereld.

In het bijzonder kijken we naar de waarde implicaties van drie soorten strategische beslissingen aan de hand van 'organizational learning theory' (e.g., Barkema & Vermeulen, 1998; Cohen & Levinthal, 1990; Fiol & Lyles, 1985; Levitt & March, 1988; March, 1991; Vermeulen & Barkema, 2001). Deze drie strategieën zijn de vorming van internationale joint ventures (IJVs), internationale expansies in het algemeen en expansies in eenzelfde of andere industrieën. Bij het bestuderen van deze investeringen hebben we expliciet de kenmerken van de investeringssituatie in beschouwing genomen.

We begonnen bij de observatie dat wanneer expansies naar nieuwe en onzekere omgevingen plaatsvinden, succesvolle bedrijven vaak kiezen voor strategische allianties, omdat dit soort investeringen in het bijzonder geschikt zijn voor projecten met een onzekere uitkomst (cf. Brown & Eisenhardt, 1997; Mjoen & Tallman, 1997; Steensma & Lyles, 2000). Bouwend op dit idee, maken we in Hoofdstuk 2 een onderscheid tussen minderheids IJVs en meerderheids IJVs. Daarenboven argumenteren we dat beide zowel kwalitatief en kwantitatief verschillen van elkaar. We opperen dat een klein aandeel in een IJV (minderheids IJVs) neerkomt op een klein engagement van fysieke en leidinggevende middelen tot de IJV, hetgeen resulteert in een lager risico in vergelijking tot het nemen van een groter aandeel (meerderheids IJVs). Desalniettemin is het met beide soorten IJV mogelijk om toegang te krijgen tot buitenlandse markten. Als gevolg hiervan voorspelden we dat hoe groter de onzekerheid in de algemene omgeving en hoe nieuwer de situatie omtrent een investering is, des te groter de toename in waarde is van het bedrijf als het kiest voor een minderheids IJV in tegenstelling tot een meerderheids IJV. De kwalitatieve verschillen tussen beide types van IJVs hebben als gevolg dat ervaringen met een van de twee types niet noodzakelijk overdraagbaar zijn naar het andere type IJV. We verwachtten dat het misplaatst gebruik van voorbije ervaringen een negatief effect zou hebben op de waarde van het bedrijf. Daarom is het noodzakelijk om de rol van voorbije ervaringen op bedrijfsexpansies verder te bestuderen.

De geobserveerde selectieve, in plaats van universele, toepassing van verschillende elementen van ervaringen in verschillende investeringssituaties heeft tot gevolg dat het verband tussen ervaringen en de prestaties van het bedrijf veel complexer is dan tot op heden werd verondersteld in de literatuur (e.g., Barkema, Bell, & Pennings, 1996; Eriksson, Johanson, Majkgård, & Sharma; 2000; Li, 1995). Daarom zijn we in Hoofdstuk 3 dieper ingegaan op de inhoud van internationale ervaringen van bedrijven (cf. Levitt & March, 1988) en hebben we theorie en hypotheses ontwikkeld om aan te tonen hoe twee verschillende soorten internationale ervaringen – breedte en diepte ervaringen – de creatie van waarde als gevolg van buitenlandse expansies beïnvloeden (cf. Luo & Peng, 1999). Een sleutelgedachte in deze studie is dat vorige ervaringen en de daaruit volgende routines in het bedrijf mogelijk ontoereikend zijn om succesvol een gegeven markt te betreden (Levitt & March, 1988). Deze ontoereikendheid kan dan op zijn beurt leiden tot negatieve prestaties (Haleblian & Finkelstein, 1999). We stelden voor dat diversiteit in ervaringen een bedrijf beschermt tegen de mogelijkheid van negatieve bedrijfsresultaten. Verder constateren we ook dat de politieke, culturele en macro-economische context waarin ervaringen hebben plaatsgevonden en waarin deze ervaringen mogelijk worden hergebruikt, invloed hebben op de capaciteiten van het bedrijf om waarde te creëren met nieuwe buitenlandse expansies (cf. Delios & Henisz, 2003).

In Hoofdstuk 4 hebben we de analyse van de inhoud en de gepastheid van de ervaringen van bedrijven uitgebreid door naar de context van bedrijfsexpansies in eenzelfde en in verschillende industrieën te kijken. In tegenstelling tot de meerderheid van de studies in deze stroom van onderzoek (cf. Montgomery, 1994; Palich, Cardinal, & Miller, 2000), kijken wij vanuit een dynamisch perspectief naar de stappen die bedrijven nemen op hun diversificatieroute en naar de soorten ervaringen die hen helpen de grootste waarde te creëren. We verkennen het idee dat zowel vroegere ervaringen in een gegeven industrie als in een reeks van verschillende industrieën waardevol zijn, en dit vooral in combinatie met elkaar.

We hypothetiseren ook dat bedrijfsexpansies die exploiterend van karakter zijn, zoals greenfield investeringen of expansies naar markten die nauw gerelateerd zijn aan de kernactiviteiten van het bedrijf, relatief meer waardevol zijn als de ervaring in eenzelfde industrie toeneemt. Anderzijds zijn ervaringen met een spectrum van industrieën vooral waardevol voor bedrijven die expansies doen die meer exploratief zijn zoals expansies in ongerelateerde industrieën of acquisities.

De theoretische voorspellingen die voortkomen uit Hoofdstukken 2, 3 en 4 zijn getoetst op samples van nieuwe expansies gemaakt door vijfentwintig Nederlandse multinationals gedurende de periodes 1973-1998 (Hoofdstuk 2 en 4) en 1982-1998 (Hoofdstuk 3). Deze samples zijn gebaseerd op informatie die verstrekt is in de jaarverslagen van deze bedrijven, in persberichten in Het Financieele Dagblad, en op de gegevens van de Amsterdamse beurs die beschikbaar zijn van Datastream Advance database van ThomsonTM Financial. In overeenstemming met de theorie in dit proefschrift, wordt de afhankelijke variabele die hoofdzakelijk gebruikt wordt voor het toetsen van de hypothese dat het bedrijf waarde heeft gecreëerd door middel van een nieuwe expansie, gemeten als de abnormale verandering in de prijs van het aandeel van het bedrijf als gevolg van de persmededeling van de nieuwe expansie zoals dit gedaan wordt met de 'event study' methode. Verder is er gebruik gemaakt van zogenaamde 'multinomial regression' technieken om de hypotheses direct te toetsen. Bovendien introduceren we in Hoofdstuk 2 een nieuwe benaderingswijze om de 'event study' methode te valideren, waarin analyses van de strategische en omgevingsdeterminanten van de abnormale opbrengsten gecombineerd worden met de analyses van keuzes van de leidinggevenden en hun impact op het bedrijfsresultaat doorheen lange periodes.

In het algemeen versterkt dit onderzoek het idee dat de ervaringen van een bedrijf verschillende facetten hebben en dat verschillende soorten ervaringen van toepassing zijn op

verschillende investeringssituaties die op hun beurt gekenmerkt worden door de omstandigheden in de omgeving en de kenmerken van een specifieke expansie (cf. Anand & Khanna, 2000; Haleblian & Finkelstein, 1999; Levitt & March, 1988). Bedrijven die zich toeleggen op het creëren van waarde zouden zich het best kunnen richten op het ontwikkelen van een breed assortiment van ervaringen en routines die het bedrijf niet enkel in staat stellen om beter te presteren in de volgende periode maar vooral het bedrijf geen beperkingen oplegt die het toekomstige leren en aanpassen aan nieuwe omstandigheden onmogelijk of moeilijker maakt. Dit is vooral belangrijk in een veranderlijke wereld, waar exploratieve strategieën vaak gebruikt worden om bij te blijven met concurrenten. De succesvolle uitvoering van zulke strategieën vereist zowel efficiënte routines, die ontwikkeld kunnen worden als gevolg van een grondige kennis van een gegeven markt, en een brede kennisbasis die makkelijk gerecombineerd kan worden (Kogut & Zander, 1992) en die tevens fungeert als een goede fundering voor het absorberen van nieuwe inkomende kennis (Cohen & Levinthal, 1990).

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